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ART. I.—*On the Diagnosis of Phthisis Pulmonalis;* being an extract from a Lecture delivered at the General Dispensary, Louisville, Ky. By J. R. BUCK, M.D., Lecturer on Diseases of the Chest, in the Louisville Summer School of Medicine.

In the man, Quiligan, examined in your presence at the last lecture, and now under treatment, phthisis pulmonalis is presented in what is termed by authors its first stage; in the female, Mrs. W., and in Mason, the disease is in its third or last stage.

To a methodical investigation of this suoject it is essential, that we should first settle in our minds what constitutes the disease: what is phthisis? Is it that peculiar condition of the lungs in which there is deposited in them tuberculous matter?

or is it that condition of the *system* predisposing to the deposition of this matter? The answer to this question is of the greatest practical importance; it is the pivot upon which our views of the pathology as well as the treatment of the disease must turn. If we regard tubercles in the lungs as the cause and characteristic of phthisis, as it is regarded by Louis and many other distinguished pathologists, then we have only to ascertain the presence or absence of this matter in the lungs, to determine the absence or presence of the disease. But if, on the contrary, we regard this deposit as but an effect or sign of the disease, as an index pointing us to a constitutional disease, then we are led to inquire whether there be any diagnostic measures by which the disease may be detected previous to the deposition of this matter; for whatever we may think of the possibility of curing consumption when there exists tubercles in the lungs, we must all admit that under the most favorable circumstances and the most judicious treatment, it is a most formidable disease, and too often baffles the skill of the physician.

Adopting this latter opinion then, that this deposit is but an effect of a constitutional disease, and that this disease may be detected previous to the deposit, when the disease is entirely under the control of therapeutic and hygienic measures, I proceed to the enumeration of those facts and circumstances which indicate its existence in this stage.

In treatises upon this subject you will find mentioned as predisposing causes of phthisis, the existence of the disease in the ancestors of the patient; narrowness of the chest, transparency of the skin, sedentary habits, occupations exposing to the inhalations of dust or vapor, certain ages, morbid sensitiveness of the mucous membranes; hæmoptysis. These circumstances, except hemoptysis, are generally regarded as merely indicating a predisposition to phthisis; while according to the view I entertain they indicate to us, unerringly, the actual existence of the disease, and its existence in that stage in which it is most important for us to recognise it, as being the only one in which we can hope, uniformly to effect a cure.

I am aware that Louis regards hæmoptysis, when unaccompanied by suppression of catamenia, or not the result of an injury, as indicating always the existence of tubercles in the lungs; and this he infers from the fact, that in the examination of some hundreds of subjects where hæmoptysis had occurred during some period in their lives, tubercles were found in their lungs. But is this a logical conclusion? At best it is but a remarkable coincidence; and if the uniformity of concomitance be such as to induce a belief that they sustain to each other the relation of cause and effect, where is the shadow of reason for regarding tubercles rather than hæmoptysis as the cause. Hæmoptysis occurs generally as the very first evidence of a departure from health, and long before there is the slightest trace of tuberculous deposit to be detected in the lungs by the nicest physical examination. From the limited space in which almost uniformly it is at first deposited, the thin lamina of lung constituting its summit, a very minute portion gives rise to dullness on percussion, and to certain alterations in the respiratory sounds.

If tubercles were the cause of this hemorrhage, as the deposit increased we should expect the hemorrhage to increase in the same ratio. The very reverse of this is true; it is most copious when there is no physical alteration of the lung at all; and it diminishes as the deposit increases. It is true that we sometimes have copious hæmoptysis in the last stage of phthisis. It is then caused, however, by the tubercular matter producing inflammation and ulceration of the coats of the blood-vessels—causes which cannot exist in the earlier stages. There are but two ways besides this by which tubercles can possibly produce hæmoptysis. They may by irritation cause an afflux of blood to that part of the lung; or they may, by mechanically obstructing the circulation, cause congestion, and hæmoptysis may be the result of this congestion; and doubtless this does sometimes occur, for we find slight hæmoptysis occurring occasionally throughout the whole course of tuberculous disease of the lungs.

But whenever hemorrhage is an effort of nature to relieve

a congested organ, the very moment the organ is relieved the hemorrhage ceases. Can this be the case in phthisis pulmonalis? The summit of either lung cannot contain an additional half ounce of blood, without being plainly and readily detected by physical examination; and yet hæmoptysis occurs when there is no physical alteration appreciable, and then often to the extent of 5, 10, 15, or 20 ounces. But you may ask me, if this be not the cause, what is? and I candidly confess my inability to answer this question, even to my own satisfaction. It is doubtless some lesion of the blood itself, and not of the blood-vessels; in what, precisely this alteration consists has yet to be determined. It is sufficient, however, for my present purpose, to prove to you that tubercular matter is not the cause. I am endeavoring now to diagnosticate to you the existence of phthisis pulmonalis previous to the deposition of tubercles in the lungs; and hæmoptysis I regard as by far the most important sign of the disease in this stage; and as it occurs often as the very first evidence of a departure from health, it becomes exceedingly valuable as affording us the earliest information of the most insidious approach of this arch enemy of life. It may also be asked, why hæmorrhage occurs from the lungs rather than from any other organ of the body, if it result from a lesion of the blood. I do not know that any satisfactory explanation of this fact has been given. Some very recent discoveries of Professor Horner may throw some light upon this hitherto obscure subject, if not indeed free it from all obscurity. By a series of interesting experiments he has ascertained that there is direct communication between the bronchial tubes and the blood-vessels of the lungs; though the fact was at first discovered accidentally the experiments were afterwards repeated, and uniformly with the same result. While the blood is unchanged, retaining its natural cohesiveness, the circulation goes on normally, but if it lose this characteristic and becomes thin, it passes from the veins and enters into the bronchial tubes, and is thence discharged from the lungs. If a patient come to you then, from twenty to thirty years of age,

the period at which the disease is most likely to occur, of sedentary habits, narrow chest, transparent skin, morbid sensitiveness to cold; whose occupation exposes him to the inhalations of dust or irritating vapor, and who has had an attack of hæmoptysis, you may pronounce it unhesitatingly a case of phthisis pulmonalis; and if you now suffer your patient to remain without treatment, tubercles will sooner or later be deposited, and the chance for a permanent cure be very materially lessened. Nor is it necessary that in each individual case all the symptoms here enumerated should be present. Take any other disease, pneumonia, pleurisy, or pericarditis, and you meet with cases where one or two or more of what are termed the most prominent symptoms are absent; so it is with the disease under consideration, although in every case a sufficient number of these symptoms remain to characterize the disease. At this stage of phthisis the treatment is simple and such as would naturally suggest itself to every intelligent practitioner. A change in the habits and mode of living of the patient will often be sufficient to effect a cure. If medicines are required at all, gentle tonics, of which the ferruginous preparations are the best, with purgatives, diuretics and diaphoretics, as occasion may require, will be found amply sufficient.

I have here notes of three cases, taken from my case book, in which the symptoms of phthisis presented themselves years before there was the slightest evidence of disease of the lungs; and when tuberculous deposition might, in all probability, have been prevented.

Miss T. æt. 18 years, dark hair and eyes, habits sedentary, chest narrow. Father, brother, and sister died of phthisis pulmonalis. Miss T. enjoyed uninterrupted health until 15 years of age, when, without any apparent disease, she became slightly debilitated, not sufficiently so, however, to be confined to the house. While in this condition she exerted herself in attempting to prevent an acquaintance from getting a letter out of her hand, and was a few minutes afterwards seized with hæmoptysis, amounting in the three days during which it con-

tinued to several pints. Alum, acetate of lead, and acid drinks were administered. In the course of a few weeks she was restored to her usual health, and with the exception of repeated colds was not again in the slightest manner indisposed till June, 1842—just two years and a half subsequent to the hæmoptysis. An attack of cold then left her with a short dry cough, and occasionally some slight shooting pains about the chest. These symptoms continued for several months, when she was attacked with chills, first every other day, and then every day, followed by fever and profuse night sweats, and total suppression of catamenia.

I first saw her October 25th, 1842. She then had cavities in the summit of the left lung and tubercular matter in the summit of the right. She died January, 1843.

Andrew Spencer, æt. 30 years, a cooper by trade, tall, very spare, coal-black hair, black eyes, no family predisposition to disease of any kind; had intermittent fever occasionally when a boy; with that exception his health had always been good. July, 1839, while at work at his trade, apparently in perfect health, hæmoptysis to the extent of a pint came on; this continued, at intervals of a few weeks, sometimes of months, for two years, without the slightest evidence of disease of the lungs or of any other organ of the body. Symptoms of a local affection of the lungs then appeared. When I first saw him, July 13th, 1842, cavities existed in both lungs.

Mrs. B., æt. 43 years, below medium height, dark complexion, very slight family predisposition to phthisis pulmonalis, health always good until she was 39 years of age, when she had an attack of pleurisy. She recovered from the pleurisy perfectly, but has always since been remarkably susceptible to cold—to use her own language, she "hardly knew what it was to be without a cold." Three years after the pleurisy, while in the enjoyment of her usual health, and, what alarmed her still more, while free from cold, she suddenly felt a tickling sensation in the throat, giving rise to slight cough, with the expectoration of about half a pint of

blood. From this she recovered in a few days, and continued free from any symptom of disease of the lungs for two years. In January, 1844, it was discovered that there were cavities in the left lung, and tubercular matter in the right. She died in March.

I might mention other similar cases, many of which doubtless have occurred in the practice of almost every physician, as they will also occur in yours.

It is much to be regretted that while we possess the means of detecting the disease at this stage, we are rarely called upon to do so. If the physician is called in at all, it is only to treat an attack of hæmoptysis; and so soon as that is relieved his services are dispensed with. If he should represent to the patient his true condition and the threatening nature of the disease, his opinion, generally, would be disregarded. Patients will not disconnect consumption from cough expectoration, pain in the breast, &c., and so long as they have no symptoms of a local affection of the lungs, so long will you be unable to succeed in convincing them, that they have consumption. Hence it becomes important that the distinction between tubercles in the lung, and phthisis be known and recognized by all; that patients may be induced to submit to treatment when their diseases may be readily cured. It is also essential to a judicious treatment, that this distinction be borne in mind—that the disease be separated from one of its effects, more especially as the effect is opposite in character to the disease. The disease being constitutional debility, the effect local inflammation, remedies for one condition may act injuriously upon the other, if injudiciously administered.

Louisville, July, 1844.

ART. II.—*A Case of Abdomino-intestinal Wound, successfully treated.* By ANDREW R. KILPATRICK, M. D., of Woodville, Miss.

The following case occurred on the Bayou Huffpower. Avoyelles Parish, La., in the year 1838:

Alfred, a negro man, æt. 47 years, while engaged 23d August, with a fellow servant in cutting down a large tree, both standing facing each other, the other man's axe flew off the helve in the downward stroke, and with considerable force entered the abdomen of the patient, dividing the recti abdominal muscles transversely, at the line dividing the left iliac from the left lumbar region, more than six inches in extent; and also dividing the ileum transversely fully eight lines. The whole blade of the axe entered and it did not fall out till his clothing was removed, when it was followed by nearly a hat-crown full of the descending colon, ileum and jejunum, which were loaded with alimentary substances, melons and seeds. The accident happened at half past 4 o'clock, P. M.; it was an hour and a half before I saw him, at which time he was nearly exhausted with loss of blood and pain. Some stercoraceous matter, shreds and seeds of melons were passing constantly from the orifice. The intestinal coats and mesentery were highly injected with blood, and there was a dark areola around the wound in the ileum. No part of the omentum was exposed, or visible.

Owing to the gorged state of the entire alimentary canal, I had considerable difficulty in returning the protruded portion; but after squeezing out some of the contents they passed in more readily than was at first expected. I was particular in retaining the wound of the intestine at the external orifice during the manipulations.

I now proceeded to the dressings of the wounds, and—

1st. Introduced a suture through the lips of the wounded intestine, brought the ends out and secured them externally, so as to keep the wound of the intestine at the abdominal

wound to admit the escape of any discharge which might take place, and prevent, if possible, any from falling into the peritoneal cavity.

2d. Closed the external wound with three interrupted sutures, adhesive strips, compress and bandages.

At one time while returning the intestines his pulse was very slow and feeble, but at the time of applying the last dressings it was 65 and regular. He complained very much of the pain and soreness, comparing the sensation to that of a bar of iron of immense weight pressing on the abdomen. At 10 o'clock that night a dose of ol. ricini was given which was thrown back with a large amount of half-digested food of a disagreeable acid odor—other medicines were given, attended with the same results; the stomach retaining nothing but cold water.

24th. Rested well during the night. Slight febrile symptoms; no alvine discharge; urine passed with difficulty; no appetite; wound in good condition and discharging pus. At 8 o'clock, A. M., v. s. oz. viii; gave small dose of sulp. mag. which was retained with difficulty; applied large sinapism to epigastrium.

Evening. Two small evacuations obtained by glysters; pulse quick and frequent; v. s. oz. iv.; anorexia; abdomen tympanitic. Ordered small portions of sulp. mag. every half hour and enema at midnight if there should be no discharge before then; and v. s. if pulse warranted it.

25th. Morning. Rested well last night; two passages; pulse normal; less tympany; wound in good condition; adherent and granulating finely throughout its entire line; sutures all in *situ;* anorexia and nausea; applied vesicatory to epigastrium.

Evening. Three evacuations; much flatus escaped; bowels noisy and in constant motion; pulse 108, full, compressible.

Finding the suture in the intestine loose, I removed it very easily as it had cut through the coats of the intestine. There was no alteration produced in the wound by the withdrawal

of this suture; adhesion progressed steadily. Still no appetite; tympany less.

26th. Morning. Rested well last night; one dejection during the night; pulse 80 and full; urinates without pain; took a little gruel.

Although I am averse to prognostics generally, yet I expressed the opinion that the patient would survive the injury.

27th. Morning. Rested well the 24 hours past; several copious alvine evacuations which contained melon seeds swallowed on the 23d. The wound was in a healthy state, granulating finely and rapidly; tympany almost disappeared.

28th. Evening. Continues to rest well; tongue slightly furred; pulse 68; borborigmy; appetite almost insatiable; adhesions seemed to be nearly thorough.

30th. Morning. Being otherwise engaged, I could not visit him on the 29th. Sleeps well, though weary of the recumbent posture. Felt some pain in the wound yesterday, which was followed and relieved by the discharge of much reddish-brown liquid from the orifice. Accidentally my pocket case of instruments fell on the patient's abdomen this morning which caused him to move suddenly and flinch, and immediately a vast quantity of fæcal matter, bile, bloody serum and pus gushed forth from the wound in a large stream. I made firm pressure on the abdomen and caused as much to be discharged as possible; air or gas also escaped in bubbles. The abdomen now became flaccid, and the lips of the wound were easily drawn in apposition and thus maintained by adhesive strips. Sutures having cut through were removed; appetite good; pulse 60. No passage on the 29th.

31st. Morning. Much pain in the sore; the above mentioned fluid constantly passed from it. On removing the dressings consistent fæces were seen lying in the wound. He observed that when he ate thin or watery diet it would escape from the wound in a short time, but if the food was solid it would pass on, stopping a little at the orifice as if hesitating whether or not to pass. The orifice is about three lines across; this was drawn together and secured tightly with

numerous adhesive strips and the roller drawn as tight as could be borne.

Sept. 1st, 2d, and 3d. I determined not to meddle with the wound so frequently as formerly; for no doubt it retarded adhesion and sometimes tore up what had been imperfectly formed. Some watery discharge, but no bilious, or fæcal stain; repeated dejections, natural and easy; pulse 60.

5th. Found him much better, the wound having closed with the exception of a very small circular orifice, through which gas and a very slight portion of fæcal matter had passed.

7th. He now walks about without suffering any pain, and can sit up several hours in the day; opening smaller.

From this time to the 15th he rapidly regained his strength, and was able at this last date to hoe in the garden. Whenever any flatus collects in the bowels and moves down to the wound, it there stops a little, causing some uneasiness, but by pressing the hand over the part it quickly vanishes.

A furuncule formed under the cicatrix on the 12th, gradually maturated and bursted on the 20th, and discharged a quantity of pus. At this date the cicatrix is complete and much smaller, and neater than would have been supposed.

So this case was safe in less than twenty days from the time of the injury. The thermometer from 10 to 3 o'clock every day ranged from 87° to 93° Fah. He lay for more than an hour and a half with several feet of the alimentary canal exposed to the air, which was becoming dry from the exposure, and irritated by the constant handling of the negro men who were trying to replace it; he had to be transported, in a very inconvenient manner, nearly a mile to the house, and the thread through the intestine, and his own mental horrors in prospect of speedy death, were so many circumstances most unfavorable to his recovery. Yet he survived all, and was well and useful a few months ago. I am of opinion, from the circumstances and symptoms attending this case that the intestine has become attached to the peritoneal lining of the abdomen.

June, 1844.

ART. III.—*A Case of Extensive Fracture and Depression of the Skull, in which the patient recovered without an operation.* By D. C. SMYLEY, M.D., of Pleasant Hill, Ala.

As I rode by the plantation of Mr. James Lawson, on the 24th of January last, I observed a mulatto girl, aged not quite 8 years, who had received, a moment before, a severe wound on her head from the falling limb of a tree. She was lying on the ground, apparently dead, the heart beating feebly at intervals. On examination, I found the left half of the frontal bone, except a small part which aids in forming the external angle of the eye, driven in upon the brain, the superciliary ridge pressing down immediately over the eye; the upper portion of the left parietal bone was also fractured and depressed, the fracture, about three inches in width, taking the sagittal suture as its upper line, and extending over a part of the accipital bone. My wrist, I believe, might have been buried in the fracture.

The first step was to elevate the superciliary ridge, and restore it to its place. This being done, the patient, for the first time, was seen to breathe. She was then taken to the house where dry clothing was provided. Her head, in the next place, was shaved, and reaction having come on to some extent, the depression began to disappear, the contents of the skull forcing out the fragments of bone which were greatly comminuted. Sinapisms were applied to her extremities which remained very cold. Her pulse was irregular in volume and beat. I attempted to give a dose of extract of elaterium, but found the patient was unable to swallow.

25th. Patient lay in a stupor all night; extremities still cold; considerable vomiting has taken place, with a large discharge of bile; pulse still irregular, and about 87 in the minute. To-day she is able to swallow. Gave three small doses of calomel and Dover's powder in the evening, and ordered an injection during the night.

26th. Rested badly last night; pulse 90, but not quite so

irregular. Had two alvine evacuations early this morning, which were decidedly bilious. For the first time had a discharge of urine. Extremities have become warm. Before I arrived this morning half an ounce of blood had been taken, by which I was informed rigors were near being brought on. In the evening small portions of morphine and muriate of ammonia were given, which prescription was continued regularly throughout the treatment.

27th. Rested a little last night; skin quite pleasant; pulse 96, and becoming more regular. The head has become much swollen and puffed out, except immediately over the superior posterior angle of the parietal bone. An operation being proposed at this stage of the case, I objected on the ground that the patient seemed improved, and that the longitudinal sinus was probably lacerated. It was however agreed that it should be performed provided there was not a decided improvement by evening. Meantime, an injection was ordered. In the evening the patient began to evince some return of intellect. Directed two small doses of calomel and Dover's powder during the night.

28th. Part of the night patient rested well; had one evacuation early this morning; pulse more natural, but still 96. In the evening gave a dose of Epsom salts.

29th. Patient rested very well; had two stools during the night; pulse almost regular at 93. In the evening the swelling and ecchymosis which had extended to both eyes began to abate; ordered nourishment in the form of cornmeal gruel.

The patient continued to improve up to the 4th of February when she was dismissed cured. For six or eight weeks after this time she could not articulate distinctly, and even now cannot pronounce some words intelligibly.

On the day after the accident the wound was not much swollen, and on the slightest pressure with the finger over the fracture a crepitus was distinctly heard as between small pieces of bone. Not the slightest wound was inflicted upon the external teguments. The head on the injured side re-

mains considerably flattened, and can never regain its original form. The superciliary arch of the left eye is also somewhat depressed. For about fourteen days incomplete paralysis of the right side existed, but has now disappeared. The mind appears clear, but the girl does not answer questions with the same promptness that was natural to her before the accident, and with this there is noticeable some languor in her bodily movements.

May 26, 1844.

ART. IV.—*Foreign body in the Larynx—Laryngotomy.* By C. J. THORNTON, M.D., of Henderson, Ky.

The subject of this case, a healthy male child, twenty-one months old, was playing in the garden with beans of the long white variety, when suddenly the attention of his mother was attracted by fits of coughing which seemed to deprive him of breath. After successive paroxysms, he became comparatively quiet. At intervals, however, he was attacked as at first, but not so violently. I was consulted about three weeks after the accident occurred, and upon examination readily detected the presence of a foreign body in the larynx, passing to and from the trachea with every inspiration and expiration. As yet but little inflammation existed, less, indeed, than might have been expected; but from the small probability of foreign bodies being expelled from this location, I advised an operation at once. The parents not consenting, I was compelled to wait the course of events.

Some weeks after, I was hastily summoned, and now found the child's condition truly alarming. There was laborious breathing, with stridor; extensive inflammation of the mucous membrane; constant and distressing cough, and puriform expectoration.

Assisted by Dr. Read, in the presence of Drs. Swan and

Boram, I commenced the operation by an incision through the skin and cellular substance, proceeding rapidly, but carefully to divide the crico-thyroid membrane. It was necessary to secure two branches of the thyroid artery, and a branch of the inferior thyroid vein which bled profusely. After extending the incision as far as practicable, I found it impossible to dilate the blades of the forceps sufficiently to seize the bean, and on a moment's reflection, I determined to make an effort to force it with a bullet-pointed probe through the rima glottidis, seeking an opportunity to take it, as it were, by surprise. This I readily effected, owing in a great measure to the smooth and rounded surface of the bean.

This mode of effecting the escape of a rough or irregular body, would be difficult, if not impracticable. I see that Sir B. C. Brodie lately succeeded in a similar attempt; though it would appear from the experiments of Mr. Erichsen (Lancet, 1843) that the irritation and consequent spasmodic constriction of the glottis, would, under all circumstances, render this effort at the expulsion of foreign bodies abortive. I will only add, that the child recovered speedily, and is at this time well.

Henderson, July 5, 1844.

REVIEWS.

ART. V.—*A Practical Treatise on the Diseases of Children.* By D. FRANCIS CONDIE, M. D., Fellow of the College of Physicians; Member of the American Philosophical Society; Honorary Member of the Philadelphia Medical Society, &c. Philadelphia: Lea & Blanchard. 1844. 1vol. 8vo. pp. 651.

Books on the diseases of children are multiplying almost as rapidly as the children themselves—at least

Every day and year brings forth a new one;

and if the rate of increase continues, nothing short of Malthus' proposition will put a stop to it. What with out-and-out new ones, and old ones renewed, '*rifaciamento'd*,' revamped —a modicum of new wine put into old bottles—we bid fair to have about as many of the books as of the children. The press is 'prolific,' truly, *quoad hoc*, not to mention the foreign ones Americanized or adopted: for, as in the glorious days of 'rare Ben Jonson,' it was the custom for extraordinary men to have adopted sons, spirits congenial to their own; so in these latter times, our extraordinary medical authors adopt and christen with their name the mental offspring of others. Whether with the books, as with the 'human blossom,' every change shows some new beauty, we are not prepared to say.

Brodie somewhere observes, in relation to a *plaster*, got up by an old fellow named Kirkland, whose name it bore,

that how it should have ever entered into any man's head to make such a composition, he does not know; but the composition being invented, he is bound to say it is a very useful one. Something similar to this may be said of Dr. Condie's book. How he should have conceived it *necessary* to make the book, we do not know; but being made, we must say, we believe it to be a very good one.

We do not intend, nor is it indeed necessary, to give a lengthy analysis of this book—its nature forbids the attempt. We plunge therefore at once into the middle of the volume, selecting such matters as seem to us novel, or as will serve to give our readers a touch of the author's quality.

Our first extract will relate to what we apprehend is very rare—*polypus of the rectum.*

"Polypus in this situation, has been very generally overlooked, it being, probably, mistaken for prolapsus ani, to which it bears a very close resemblance. It is, nevertheless, somewhat remarkable, that it should have escaped the notice of almost every modern writer on the diseases of children;—for, although of not very frequent occurrence, it is, nevertheless, much more so than physicians would appear to be aware of. Several instances have fallen under our notice; and although they were generally presented to us as cases of prolapsus ani, yet, upon a careful and minute examination,—a neglect of which, in such cases, would be unpardonable—we have never found the least difficulty in detecting the true character of the complaint.

"When a polypous tumor forms in the rectum, during childhood, the little patient is troubled, at intervals, with a repeated, often ineffectual desire to evacuate the bowels, generally attended with considerable straining, during which, sooner or later, and finally, every time the straining recurs, a tumor is protruded from the anus—varying in size in different cases, from that of a cherry, to that of a large hickory-nut. The tumor is, usually, of a bright, or dark red color, but often white, or of a dirty yellow; it is, in most cases, thickly covered with a tenacious, bloody mucus. When of a dark red, or purple hue, it is apt to bleed freely, especially when handled or irritated. When the tumor is protruded, it is situated in the centre of the anus, and entirely without the sphincter, and appears as if it were attached, all around, to the edge of the

anus. On passing the finger into the rectum, a slender pedicle is found to proceed from the base of the tumor, for a short distance within the gut, to the inner surface of which it is attached. When the polypus is of considerable size, the straining efforts to evacuate the bowels are often very violent, and attended, sometimes, with considerable pain; and when it is finally protruded, it is found to be surrounded by a slight eversion of the lower portion of the rectum. In one of the cases that came under our notice, the tumor, which was of large size, separated, and came away spontaneously; the hæmorrhage which followed was very slight, and soon ceased, without the necessity of our resorting to even a compress. In the other cases, the tumors were readily removed by ligatures—in the application of which there is not the least difficulty—without the occurrence of any severe or untoward symptom."

In looking over the chapter on the diseases of the respiratory organs, the term *atelectasis pulmonum* arrested our attention. Dr. Condie gives the following account of it from Jörg:

"The disease consists in an agglutination or obliteration of the pulmonary cells, to a greater or less extent, in one or both lungs. The portion of the lung in which this obliteration of the cells exists, is depressed below the level of the surrounding tissue, and is of a dark red or violet hue. It presents, when incised, a smooth, red surface, from which a bloody serum may be squeezed, but in which no air bubbles can be detected. This condensation of the tissue of the lung, from obliteration of the air cells, is not produced by either inflammation or effusion, but is the result of imperfect respiration, which prevents the air from penetrating and distending all the cells of the lungs; the parts affected, consequently, retaining the color and density of the fœtal lung, and sink when placed in water.

"The causes assigned for this affection, are, a very rapid and easy delivery, or a too strong compression of the head of the child during parturition; both of which circumstances are common causes of asphyxia in new-born infants; or when respiration does take place, prevent it from being sufficiently full to dilate the whole of the texture of the lungs, and, hence, give rise to the disease under consideration.

"The affection is especially characterized by an imperfect,

short, anxious, and sometimes scarcely perceptible or intermittent respiration; a feeble, plaintive cry, difficulty of sucking, an imperfect elevation of the ribs and sternum, livid or blue color with coldness of the skin, a weak languid pulse, and symptoms of general prostration. In consequence of the imperfect respiration, and impeded circulation, nutrition is always impaired, and hence, if the child survive, it becomes emaciated, and cannot bear the slightest motion or exercise; in some cases congestion of the brain is produced, and convulsions; or, from the violence of the respiratory efforts, inflammation of the bronchii and lungs.

"The efforts of the obstetrician should be, as early after delivery as possible, to induce in the infant a deep, full, vigorous inspiration; for, if the respiration be allowed to continue weak, and the lungs to be but imperfectly expanded, the infant seldom survives for any length of time. The mouth of the infant should, therefore, be cleared of any mucus that may be present in it; and by smart slaps upon the glutei muscles, or upon the palms of the hands and feet, respiration will often be fully established, or we may proceed as directed in the section on asphyxia. Rubbing the chest and back with sulpuric ether, and introducing it into the nostrils and mouth, immersion in an aromatic warm bath, and repeated clysters and emetics are recommended by Jörg, all of which are of doubtful propriety. Emetics, and all means which tend to increase the engorgement of the vessels of the brain, are, indeed, strongly contra-indicated when the brain has been injured during labor; in these cases a few grains of calomel, and stimulants to the lower extremities, cool lotions to the head, and even leeches to the latter, will be found of advantage."

Under the head of *laryngismus stridulus—spasmodic croup*, our author treats of the affection that has recently attracted attention under the name of thymic asthma. Kopp, of Germany, was the first who accurately described this disease, attributing it to hypertrophy of the thymus gland, an opinion which has given rise to considerable discussion, and is upheld by many German and British practitioners. The prevailing sentiment, which is also that of our author, is that the enlargement of the gland is merely accidental, and has nothing at all to do with the essential symptoms of the disease, being rather a consequence than a cause.

In the section on diseases of the nervous system, Dr. C. expresses the belief that *cerebral apoplexy* and *paralysis* are more frequent in children than is generally supposed. He states in a note that, in Philadelphia, during the 35 years preceding 1842, there were 67 deaths from apoplexy; of which 27 were under 1 year, and 16 between 1 and 2 years. He thinks that a large proportion of those reported as dying of convulsions, disease of the brain, and acute hydrocephalus, really fall victims to apoplexy. Of the symptoms he says:

"The attack is generally sudden; but, in many cases, it may be preceded for some days by a deranged condition of the bowels; or it may occur after an attack of convulsions, or in the course of some other disease. The symptoms are, invariably, more or less complete stupor, with a tumid and livid appearance of the face, contraction and insensibility of the pupils, laborious or stertorous respiration, and, occasionally, convulsions, or a spastic rigidity of the neck and lower extremities. On recovering from the state of stupor, the child may exhibit no lesion of motion or sensation on either side of the body, or one side, or the upper or lower extremity of one or the other side, may be in a state of complete or partial paralysis."

The prognosis of this state is not so unfavorable, if proper measures are promptly resorted to. If, however, it is allowed to run on, or if the attacks are repeated at short intervals, effusion on the surface of the brain, or some structural lesion is likely to occur, ending in death, or in greater or less impairment of intellect. It is most manageable in very young children, least so in the older.

The morbid appearances usually found, are engorgement of the cerebral vessels and sinuses, and sanguinous oozing from small bloody points upon the medullary surface when cut, occasionally serous effusion under the arachnoid, at the base of the brain, in the ventricles or theca of the spinal cord. Hemorrhage from rupture of the vessels, or of the structure of the brain, even where paralysis has occurred, is by no means so frequent as in the adult. Nevertheless, in children over two years of age, our author has not unfrequently detected he-

morrhage within the substance of the brain after attacks of apoplexy, and, in many cases, persistent paralysis.

When the hyperemia, and effusion of serum or blood, is principally confined to the spine, it constitutes what is called *spinal apoplexy;* the phenomena differ from those of the corresponding lesion of the brain.

"When there is simply turgescence of the vessels and texture of the medulla spinalis, the symptoms that have been observed are, occasionally, convulsions, drowsiness bordering on stupor, lividity of the face, drawing down of the corners of the mouth, and the fixation of the arms firmly against the sides. The symptoms from serous effusion vary somewhat in different cases; thus, in one instance, we may have severe pain in the back, paralysis of the inferior extremities. In another, opisthotonos, difficult deglutition, and coma. In another, violent convulsions, coma, and distortion of the eyes. In another, convulsions, followed by coma, with a permanent clenching of the hands. When blood is effused in the spinal canal, the symptoms are, pain in the back, and general convulsions, or trismus, and convulsions, either tonic or clonic."

Cerebral hemorrhage often occurs with symptoms altogether different from those of ordinary apoplexy, and is generally mistaken for some other lesion of the brain. It is met with in children from one to two years of age, and is rarely seen after the third year.

"The symptoms in the early stage are rather those of encephalic irritation, than of apoplexy; and in the later stage, of protracted cases, they differ but little from those of chronic hydrocephalus. The attack sometimes commences with repeated convulsive paroxysms; at other times, with all the phenomena of cerebral inflammation; and in numerous instances, the disease has unquestionably been mistaken for acute hydrocephalus. The child may be affected with vomiting, though in the majority of cases, this symptom is not observed. There is, very generally, in the commencement, severe febrile excitement, with flushed face, hot skin, and a frequent, full, and hard pulse, increased thirst, and loss of appetite. The pulse at first amounting to 100 or 106 in a minute, and soon increasing to 120 or 140, and in the advanced stages of the disease becoming so rapid as scarcely to be

counted. Very early in the attack, the patient is affected with slight convulsive movements, particularly of the eyeballs, which are followed by some degree of strabismus. The bowels are in general regular, and the stools natural in appearance. The child is often seen to carry his hands continually, but apparently unconsciously, to some part of the head. There soon occurs a permanent contraction of the feet and hands, followed by convulsions, either tonic or clonic; during which there is an abolition of sensibility and consciousness, and an increased turgescence and coloration of the face; sometimes the convulsions affect the whole of one side of the body, sometimes the upper limbs of one side only; not unfrequently, both sides are affected, but unequally; the convulsive movements being always greater in one than the other. After continuing for a few moments, the convulsions cease, and the patient remains in a state of drowsiness, which increases with the progress of the disease. The febrile symptoms continue throughout the attack, and augment in intensity as death approaches. The convulsive paroxysms occur first after irregular intervals of some length, but become gradually more frequent, until finally, towards the close of fatal cases, they are almost continual, or rather, the patient is affected with a constant tremor, with momentary convulsive paroxysms, during which, the injection of the face is increased, and the pulse and respiration accelerated. In no instance has paralysis been observed during the acute stage. When death takes place, it is generally at the end of eight or twelve days. The occurrence of thoracic inflammation appears, in many cases, to be the cause of death in the acute stage."

The disease may become chronic and continue from eight to thirty months, and would probably continue longer, if, as in the acute stage, accidental causes did not accelerate death. When protracted, the convulsive paroxysms and the febrile symptoms diminish and finally disappear; the cranium enlarges; there is strabismus; dilated pupils; occasionally loss of reason; and in most cases a greater or less impairment of intellect, the child becoming idiotic.

"The appearances upon dissection, when death takes place in the acute stage, are either a simple effusion of bloody serum, or more frequently a bloody serum, containing small, thin, reddish clots of blood, the whole inclosed in a kind of

sac, formed by a soft, thin membrane, attached to the lower surface of the arachnoid. The effusion is invariably found within the arachnoid cavity; in the sub-arachnoid cellular membrane, and in the ventricles there generally exists a small quantity of perfectly limpid, or light citrine colored serum. The effusion most commonly occurs upon the surface of both hemispheres. It is sometimes, however, confined to one, and rarely occurs upon the cerebellum. The clots are usually very thin, from two inches and a quarter to two inches and a half in extent, soft, and of a bright color when recent, but becoming brownish or greenish, and more firm the longer the period that has elapsed since the effusion took place. They may exist on a level with the anterior and middle fossæ of the base of the brain; but more generally occur upon the upper surface of the hemispheres. The clots are invariably covered with a reddish, elastic, soft, delicate membrane, but of some degree of firmness, and about one-tenth of an inch in thickness; it may be detached from the surface of the arachnoid in small shreds. This membrane always becomes more elastic and firm the longer the effusion has existed. Most writers refer its production to a mechanical separation of the fibrinous portion of the effused blood, which, deposited on the under surface of the arachnoid, becames gradually organized; the first vestiges of organization presenting themselves about the fifth day after the effusion has occurred.

"The veins of the surface of the hemispheres are occasionally gorged with blood, and the cortical substance of the brain of a very bright reddish grey; the incised surface of the brain becomes studded with numerous bloody points. The convolutions are not sensibly flattened, nor the brain in a state of hypertrophy: it has been supposed to be in some cases even reduced in size, which is, probably, however, a mistake. Not the slightest trace has been discovered in any case, of grey, semi-transparent granulations on the pia mater throughout its extent, nor the least appearance of tubercle, in any part of the brain.

When death occurs at a later period, the clots are found enclosed in a true organized cyst; this adheres intimately to the lower surface of the arachnoid, by means of a very fine, delicate cellular tissue, that is very easily torn, and permits the cyst to be detached entire. The cyst has no attachment to the surface of the brain, excepting by vessels which pass over it to the latter. The contents of the cyst are coagula of blood and a bloody serum, but more generally the last only, which is then always in considerable quantity. The blood is

sometimes in the form of soft, red coagula; at others, the cyst contains a brownish, turbid, red serum, in the midst of which float filaments of a soft, somewhat elastic, greyish-red substance, having a close resemblance to fibrine. The parieties of the cyst are thin and transparent; over their surface pass numerous small branches of vessels to the brain. Its cavity is at first single, but subsequently it becomes, by the approximation of its sides, at different points, divided into a number of small cells; there is generally one triangular cavity of an inch or two in length, extending along the falciform process of the dura mater."

The etiology of this form of cerebral hemorrhage is obscure. Age is one of the chief predisposing causes, it being seldom seen in children under one year, and still more seldom in those beyond three. The hemorrhage arises generally from exhalation, rarely from rupture of blood-vessels. Most of the cases observed by Legendre occurred in winter, whereas those noticed by Dr. Condie occurred in the summer, and at least one-third of them were the consequence of insolation.

It is liable to be confounded with tuberculous meningitis. The age of the patient will serve to distinguish them. The latter generally occurs after the sixth year, or at least after the period to which our author restricts cerebral hemorrhage; it is rarely accompanied by the same intense febrile reaction; convulsions are neither so constant nor so frequent; the carpo-pedal contractions are wanting.

In the chronic form it is not easy to distinguish it from chronic hydrocephalus. The latter, however, is congenital or commences soon after birth; the head often acquires an enormous size. The enlargement from chronic cerebral hemorrhage is never so considerable; the affection is never congenital, but commences ordinarily about the tenth month, or at the time of dentition, and is invariably preceded by encephalic symptoms at the time hemorrhage occurs.

From hypertrophy of the brain it may be known by the morbid symptoms in the latter always succeeding or following

the enlargement. Hypertrophy is also one of the predisposing causes of cerebral hemorrhage.

In forming a prognosis, the age must be considered. Hemorrhage from rupture of vessels is promptly fatal, but rarely occurs in very young children. When it is produced by simple exhalation, the case is not necessarily fatal; prompt and judicious treatment may cause absorption of the effused fluid. If, however, the acute stage is violent, and the convulsions frequent, or if there is any intercurrent disease, such as pulmonary inflammation, death is almost inevitable.

The treatment of cerebral apoplexy and hemorrhage will be apparent. The abstraction of blood by leeches to the head, or when the child is old enough, bleeding from the arm, is all important. Next purgatives, in which a mercurial should enter; enemata, where purgatives cannot be administered; warm and stimulating pediluvia, whilst cold is applied to the head; blisters behind the ears, or to the back of the neck; with mild diet, plenty of cool fresh air, and cool drinks. The gums should be examined, and incised if they are found swollen. After the occurrence of hemorrhage, the treatment will be nearly the same. Leeches or cups to the head, where there is still undue febrile reaction; purgatives —a combination of calomel, antimony and nitre—warm pediluvia, cold to the head, blisters, &c. In the chronic form the hygienic management is of great importance. "How far," says Dr. C., "we may be able to promote absorption of the effused fluid by the employment of diuretics combined with calomel; iodine externally and internally, and the judicious use of tonics; we must wait for the results of a more extended period to determine."

Allusion has been made to *tubercular meningitis.* Our author gives this term to the disease commonly described under the name of hydrocephalus or dropsy of the brain. We shall not enter into a detail of the symptoms and treatment, which are well known. On examination, in addition to the appearances indicative of meningeal inflammation, the surface of the membranes:

"Is almost invariably found studded with tubercles, varying in size from that of a pin's head to that of a pea; they are generally hard, semi-transparent, and of a grey or yellowish color. Sometimes they present themselves in patches of an inch or more in extent, but, in general, are scattered irregularly over the membrane; they follow the membrane between the convolutions, and are met with, also, imbedded in the grey matter of the brain, where they are often surrounded by a halo of redness, generally connected with an enlarged vessel, ramifying from the pia mater."

Chronic hydrocephalus, according to Dr. C., is not a frequent disease in Philadelphia; he has never witnessed a case, either congenital, or developed subsequent to birth. We have mentioned this here for the purpose mainly of introducing the following paragraph in relation to tapping of the brain as a remedy in this affection.

"But the plan in favor of the feasibility, safety, and success of which, the greatest amount of evidence has been adduced, is that of puncturing the brain, drawing off the effused fluid, and preventing its re-accumulation, by pressure applied around the head. The operation consists in passing a small and delicately constructed trochar, into one of the lateral ventricles, and drawing off as much fluid as the powers of the constitution will admit of. The most eligible spot at which the trochar can be introduced, is in the course of the coronal suture, about midway between the crista galli process of the ethmoid bone, and the anterior fontanelle, so that the danger of wounding the corpus striatum is avoided on the one hand, and the longitudinal sinus on the other. The instrument usually penetrates about two inches, and in most cases, the serum discharged is colorless, but occasionally tinged with blood. Sometimes, on withdrawing the trochar, the water will not flow, until a probe has been passed along the canula, to remove portions of brain which block it up. After taking away all the fluid that can be removed, consistently with safety, the head, which should always be steadily compressed, by an assistant, during the operation, may be strapped with adhesive plaster, so as retain its diminished size, and avert the fearful consequences of suddenly removing long-continued pressure from the brain. In no instance, however, has a clearly marked congenital case been permanently benefited; the cases in which the operation has been most successful, are

those in which the effusion has manifestly resulted from an inflammatory condition of the brain, and in which cerebral excitement follows the operation."

We have seen one case where this operation was practiced. Convulsions soon followed and the child died in 36 hours. We may mention here that in the acute form, after the active symptoms have been subdued, and also in the chronic form, the iodide of potassium has been used successfully.

Cyanosis—morbus cæruleanus—blue disease, was long supposed to depend upon a patulous state of the foramen-ovale, and the consequent admixture of venous and arterial blood. In the present state of our knowledge on the subject, it cannot be referred to any constant lesion. Dr. C. gives the following summary of the various malformations that have been accompanied by this disease.

"In 53 dissections of patients affected with cyanosis, the foramen ovale was open in 33; in 22 the aorta rose from both ventricles; in 22 the pulmonary artery was contracted; in 14 the ductus arteriosus was open; in 15 the ventricular septum was imperfect; in 5 the pulmonary artery was obliterated; in 4 there was but a single auricle and ventricle; in 4 there was a transposition of the origin of the aorta and pulmonary artery, with an open state of the foramen ovale, and in a few, of the ductus arteriosus, also; in one the aorta was obliterated. The right cavities of the heart are frequently found dilated, hypertrophied, or both. The hypertrophy is always most considerable in cases in which there exists contraction of pulmonary orifice. The total absence of the ventricular septum has been noticed in some cases; in one case, the heart consisted of a single cavity; in another the pulmonary artery arose from both ventricles, sending off the descending aorta; in another, the right auricle opened into the left ventricle, and a free communication existed between the two ventricles and the two auricles; in others the right ventricle was bifid; the arch of the aorta double; the coronary veins opened into the left ventricle; the inferior or the superior cava into the left auricle; the foramen ovale was closed *in the fœtus;* the valves of the heart adhered along their edges, and were consolidated into one substance, leaving only a small central aperture, or

else were perforated by numerous holes, or altogether absent. The instances of a single auricle and single ventricle are very numerous. Considerable contraction of the pulmonary artery, particularly at its origin, is a very common lesion; in a few cases, the pulmonary artery has been found completely impervious; in one case the artery was entirely absent, the bronchial arteries appearing to supply its place; and in another, the aorta terminated near the heart, in a *cul de sac.* In one case there was an entire absence of the right lung, the septum between the ventricles of the heart was imperfect, the foramen ovale and ductus arteriosis were both open: the aorta communicated with both ventricles; the pulmonary artery was imperforate at the base of the heart; the lung being supplied with blood by the arterial duct; the child lived six weeks."

Our author then proceeds:

"Sufficient evidence is thus afforded that abnormal communications between the cavities of the heart, particularly the auricles, by the non-closure of the foramen ovale; and various malformations of that organ, and of the main arterial and venous trunks, occur, in perhaps the majority of cases of cyanosis. By far the most frequent, however, is the non-closure of the foramen ovale; how far this is capable of producing the disease under consideration, is a question, however, that is yet by no means satisfactorily answered. The mixture of the arterial and venous blood, which is supposed to result from the free communication between the two auricles, is evidently inadequate to explain the blue color of the skin, inasmuch as no such discoloration takes place in the fœtus; while a communication exists in the majority of infants for many days after birth, without a single symptom indicative of cyanosis, being present. The fœtal openings in the heart, and the communication between the aorta and pulmonary artery, by means of the ductus arteriosus, are not usually obliterated before the eighth day subsequent to birth, and have even been found open as late as the third week, in infants who have died of diseases totally unconnected with any disturbance of the respiratory apparatus, in the slightest degree resembling that which occurs in cyanosis. It has been shown, in numerous instances, that the foramen ovale has remained open for a long period, without the occurrence of cyanosis; and it has been denied that any admixture of venous and arterial blood can take place, even with a free opening between the

two auricles, from non-closure of the foramen, so long as the communicating cavities are of equal strength, or provided all the orifices are free. Cyanosis has occurred in numerous instances in which no abnormal condition of the heart, or main arterial trunks, existed; and it has been absent in cases in which extensive malformation of the heart was present. It is very improbable indeed that, so long as the lungs continue to perform fully their office, and a sufficient supply of oxygenated blood is regularly distributed to the different parts of the body—even although this should be mixed with a portion of venous blood, the phenomena of cyanosis can occur: these depend, evidently, upon a disturbance of the function of the lungs, by which the due arterialization of any portion of the blood is prevented; or upon such a malformation of the heart, or abnormal distribution of the main arterial trunks, that venous, instead of arterial blood, is distributed to the organs. It may, therefore, exist without any abnormal condition of the heart, if from any cause, the blood in passing through the lungs, is prevented from undergoing the change which it is the office of these organs to effect in it; while even with extensive malformation in the circulating organ, it will not occur, so long as the lungs perform their functions freely. Cyanosis is common in many of the pulmonary affections occurring during infancy; it is also invariably present in that condition of the lungs, resulting from imperfect respiration, denominated *atelectasis*. It has been found associated with enlargement of the heart, contraction of the pulmonary arteries, and extensive 'tuberculous hardening' of the lungs; with contraction of the diameter of the glottis and trachea; with extensive disease of the brain or spinal marrow, without any abnormal changes in the heart, lungs, or great vessels, and with severe abdominal inflammations. It is also asserted that many cases of cyanosis, owe their origin, in the adult female, to some disturbance of the menstrual function, especially to sudden suppression of the discharge."

There are some other chapters which we intended to notice, but the length to which our quotations have extended, warns us to stop. The extracts we have made will however be sufficient for our purpose. In copying, we have omitted the numerous citations of authorities with which the author has interlarded and disfigured his text, and which apparently belong to all nations, kindreds, and tongues. Chiefly,

though, we believe, does he affect the German. Many of his formulæ (which we have omitted—we never could recollect one in our life, and, for that reason perhaps, have no great opinion of the man who can) are derived from German authors, and of course muriate of ammonia and hyosciamus mingle in them largely and frequently. It is probable the former is too little employed by us as an internal remedy. The latter is certainly quite a favorite with our author. He prescribes it on almost all occasions; in truth his preference for it is decidedly *hobby-horsical*, as Mr. Shandy would phrase it.

We have said nothing yet of the first part of the volume, in which the author has brought together many things of importance touching the *hygienic management of children*, *the peculiarities of organization and function in infancy and childhood*, *the pathology of infancy*, and *the semeiology of the diseases of infancy and childhood*. This is by no means the least interesting or the least valuable part of the treatise. In fact it very properly and necessarily precedes the discussion of diseases and their remedies. Here again there is a copious citation of authorities—the German being duly favored of course. We must not be understood as finding fault with our author's preference for the medical literature of that nation. He has as much right to draw from its copious stores in this department, as had Campbell, Coleridge, Carlyle, Scott, Shelley, Bulwer, and many others, to take from other departments, and he has had the honesty, which the first two had not, to acknowledge his indebtedness. Nor must we be understood as objecting to his candor in telling us on what grounds he has poached, or in what region he has levied blackmail. It was no doubt wise in him to do so; for without such precaution he might have found it as dangerous to draw from some of these sources as poor Maginn thought it would be 'to steal from Sam Rogers.'

We commend this portion of the volume especially to the perusal of the young practitioner. In all probability the diseases of childhood will be the very first with which he has to deal. It

does seem a little strange, to be sure, that what would puzzle and does puzzle the oldest and wisest heads in the profession, is expected to be fully understood by the youngest and the least wise. Yet so far as our observation has extended, certainly so far as our personal experience goes, it is to the young practitioner that the care of the *babies* falls, whilst that of the precious parent devolves upon the grey-beards of the profession. Perhaps it is because in this, as in other things, less value is placed on the common and familiar (in the West, it is not the soil only which is productive)—perhaps it is owing to the general prevalence of the sentiment uttered by Napoleon on occasion of the accouchement of his royal consort—perhaps it is on the principle of *lucus a non lucendo*—perhaps it is ordained for wise purposes and provides for the absence of the *prudential restraint* so strenuously urged by certain philanthropists—we do not know; but the fact is unquestionable; let the young physician prepare himself. C.

Art. VI.—*An Essay on the Blood in Disease.* By G. Andral, Professor of General Pathology and Therapeutics in the University of Paris. Translated from the French by J. F. Meigs, M.D., and Alfred Stillé, M.D. Philadelphia: Lea & Blanchard. 1844. pp. 126. 8vo.

Our readers require not to be informed that Andral occupies a conspicuous rank among the highest living medical authorities. His is not merely a European reputation: in all countries where medicine is pursued as a scientific profession his name is familiar, as one of the most philosophical, observant and practical physicians of the age. He has been now many years before the public as an author, and his analyses and researches are deemed among the most accurate and trustworthy, that have been given to the world on the subjects to which they relate. In the work before us he has taken up an inquiry which excited the deepest interest among medical

men two centuries ago, but which has been overlooked and despised by several successive generations of physicians. He is fully persuaded of the truth of the following sentiment from Bichat: "Humoral medicine has been exaggerated without doubt; but it has solid foundations, and in a number of cases we cannot deny that all should be referred to a vice of the humors." His object, therefore, is to remove the prejudice so long and generally entertained against the application of chemistry to pathological facts, and to bring back the profession to the chemical study of the blood. He insists that it would afford proof of a culpable ignorance, or at least of a dangerous scepticism, to refuse to accept the results of the chemistry of the present day, "because those yielded by another, which had nothing in common with it but the name, had been convicted of insufficiency or of error."

We fully agree with our author, and are ready to join with him in giving thanks to organic chemistry for the aid it is bringing by its experimental methods to the science of pathology. We believe we could not bring before our readers a work abounding more in novel and striking details than this volume on hæmatology; and we therefore propose to give as full an account of its contents as our limits will allow.

The author sets out with the statement, founded on a series of experiments made by himself, Gavarret, and Delafond, that the healthy appearance of the blood is not the same in different classes of animals, and that a feature which belongs to it physiologically in other beings, is the certain expression of a morbid condition in man. For example, the buffed appearance which, in the human species, is always indicative of inflammation, is uniformly present in the blood of horses, provided the bleeding be effected in a particular way. The composition of the blood likewise varies in different classes of animals. That of the dog contains much less fibrine than that of man and of all other animals, but it is at the same time richer in globules, while, on the other hand, the horse, the sheep, and the ox, whose blood contains more fibrine than that of man, and especially than that of the dog, have in their blood

decidedly a smaller proportion of globules than those races. In different individuals of the same species the several elements of the blood may present variations within certain limits without a disturbance of health. But for each of the elements there exists a maximum and minimum which cannot be passed in the physiological condition of the system. Thus, the average of the fibrine, in healthy human blood, is $\frac{3}{1000}$. It may vibrate about this average, falling to 2.5, or rising to 3.5 without affecting the physiological state. Some persons, says our author, without being sick, have nearly four in fibrin, and in others it may be as low as two; but these he regards as exceptional proportions, belonging rather to true idiosyncrasies, than to the system as ordinarily constituted.

For the globules, $\frac{127}{1000}$ is taken as the average in human blood; and this may vary from 140 to 110, which are the extreme limits compatible with health. But the maxiumum, 140, is linked with the plethoric condition, which by development becomes morbid; and the minimum is associated with a debility, congenital or acquired, which is often the beginning of disease.

The albumen is stated at $\frac{80}{1000}$ as the mean, which may be exceeded or depressed to a limited extent, in the healthy system, but if the diminution be carried to a certain degree, disease is the inevitable result.

Having determined the variations of quantity that the different elements of the blood may present in a state of health, we are prepared for the examination of that fluid in a pathological condition. This is conducted by means of the microscope and of chemical analysis. The first discloses differences in the volume or in the form of the globules, the existence of pus in the blood, and whatever modifications may occur in the size and other physical properties of the normal principles of that fluid. By the second, we arrive at a knowledge of the healthy constitution of the blood, and its various departures from a physiological state, whether from increase or diminution of its normal elements, or the formation of new principles in it.

The author begins by showing what are the changes in the blood in those two opposite states of the system—*plethora and anæmia*—which, though coincident with health, if not excessive, cannot go beyond a certain limit without inducing disease. With respect to the first condition, what does analysis teach? Our author answers, that it has shown him, in the first place, that the blood in plethora does not contain more fibrine than in any other condition, nor even tend to mount towards the higher limit of the physiological state; and, in the second place, that the albumen does not offer any remarkable change of proportions. Only the globules then remain, 'and it is effectively the great elevation of their proportion,' according to M. Andral, 'which establishes in the blood the character of plethora.' In 31 bleedings where the individuals were plethoric, he 'found for the mean of the globules, the cipher 141; for minimum, 131; and for maximum, 154.' The blood of such people then differs from ordinary blood in the excess of globules, and the much less quantity of water which it contains. Persons of this habit are subject to certain symptoms, to wit: vertigo, dizziness, heat of the head, and tinnitus aurium; but, very singularly, analogous symptoms present themselves if too small a number of globules traverse the vessels of the brain. Such subjects are not more liable to inflammations than those of a different habit; but they are more apt to suffer from hemorrhages, and the state often leads to true fever. Inflammation, moreover, occurring in such a constitution will be marked by symptoms of intense reaction.

Of the Blood in Anæmia.—As the characteristic feature of plethora is increase in the proportion of blood globules, so anæmia is characterised by deficiency of this element of the blood. Our author in sixteen cases of commencing anæmia found 109 to be the average proportion of the globules, and in 24 cases of confirmed anæmia he found the cypher as low as 65. These were cases of spontaneous anæmia, and he mentions that in one case of this kind he found the proportion of globules as low as 28. It is the globules alone which

are diminished in spontaneous anæmia, whether the case be strongly marked or not. But if that state be induced by excessive losses of blood, the fibrine and albumen will also be diminished after a time. Thus M. Andral, in a woman who had lost much blood from metorrhagia, found the globules as low as 28, the fibrine 1.8, and the solid matter of the serum 61—the water having risen to the enormous proportion of 915.

Anæmia is occasionally an attendant upon pregnancy, in which case, as in other instances where it is spontaneous, it is only the globules which are diminished.

The long continued action of lead upon the human constitution is also known to produce this state, in which the deficiency is found to be confined to the same element of the blood. It is the belief of our author that the globules in anæmia are not only diminished in quantity, but also altered in their structure, tending to a true destruction. In two cases of chlorosis they appeared to him smaller than natural, and some had no longer their accustomed form—they appeared in the field of the microscope broken, and disseminated like kinds of fragments. The blood of anæmic individuals presents on coagulating a small clot, swimming in an abundant, colorless serosity. This clot is dense and cohesive, and not unfrequently covered by a buff, such as one would expect to find on the blood of a patient affected with pleurisy or articular rheumatism. The density of the clot, and the buff which covers it are the more marked in proportion as the anæmia is more decided. These phenomena which have long been known to the profession are thus satisfactorily accounted for by M. Andral:

I regard as incontestable, the fact that the clot of the blood of chlorotic patients is often buffed, and like Borsieri, I have from this long since drawn the inference that the presence of the buff is not always evidence of the existence of an inflammatory disease, for chlorosis is certainly not of this character. But why is the blood, in this disease, often cupped? It is because the blood of chlorotic patients has retained all its fibrine,

and lost some of its globules; it is in consequence of this that there is really in this blood, as in that of inflammations, or as exists normally in the blood of some animals, excess of fibrine in proportion to the globules; now, whenever this excess takes place, whether it be absolute or relative, and whenever at the same time the coagulation of the fibrine is not very much too rapid, this principle will be seen to accumulate alone on the surface of the clot, and the cup will appear. This is the reason why the blood of anæmic individuals may by buffed, and why that of plethoric individuals is not; it is the cause, also, why the coagulum of blood is firmer and more dense in the first than in the last. It is also one of the circumstances which explains the constant existence of the buff in the blood of the horse. We must add to this, in the latter animal, the greater slowness of the coagulation of the fibrine."

The effects of the deprivation of the blood of this essential principle are given in the following passage:

"The blood cannot be deprived of a certain quantity of its globules, without there resulting from it great prostration of the muscular system, very marked general feebleness, grave perturbations of the nervous system, which are betrayed by different disorders of the intelligence, of sensation and of motion; and various disorders of the functions of digestion, respiration, and circulation. Who is ignorant of the various neuroses to which anæmic patients are subject, their dyspepsia, their dyspnœa, their palpitations of the heart? Who has not observed the singular discoloration of their skin and exterior mucous membranes, which is so naturally explained by the small number of coloring globules which still flow in their vessels? But what is less generally known is, that it is not uncommon to meet with individuals whose color remains natural, whose cheeks even are habitually injected to a remarkable extent, and whose external aspect would easily make us regard them as of a plethoric habit, but who nevertheless have in their blood an insufficient quantity of globules; this is because there exists in them a false appearance of plethora. Observe in effect such individuals a little more closely, and you will be struck with their feebleness; they will have, as in the most advanced anæmia, vertigo, dyspnœa, and palpitations, upon the slightest effort; they will bear with difficulty any kind of exertion, and still worse venesection, which far from diminishing, will increase their symptoms."

It is an interesting observation of our author, that the temperature of the human subject is not affected by the most considerable diminution of the blood globules. Thus individuals who had in their blood no more than 50, 40, 30, and even 21 parts in globules for 1,000 parts of blood, preserved nevertheless their healthy temperature. And not only so, but where these individuals are attacked with fever the heat of their bodies rises above the standard of health. It must be confessed that these facts are not very coincident with Liebig's hypothesis, which holds the globules to be carriers of oxygen.

Of the Blood in Pyrexiæ.—The pyrexiæ, remarks M. Andral, form a large class of acute diseases which it has been vainly sought to dismiss from nosological systems, in order to throw them all into the group of simple inflammations. He adds, that such pretensions cannot be maintained—the pyrexæ exist as diseases apart. This, he insists, is evident from the causes which develop and the symptoms which characterize them, as well as the alterations in the solids which are often posterior to the febrile movement. But it is especially by the analysis of the blood that the distinction, in his view, is made clear and conclusive. The results furnished by this analysis, he observes, have something so marked, that they seem to him to fix in a definite manner the distinction, vainly combated, between the pyrexiæ and the phlegmasiæ. In the former we find no constant alterations either in the solids or the blood that can account for the phenomena. In the latter we shall presently see the case is different. In the pyrexiæ, as our author remarks, the only phenomenon which never fails, is the fever itself. In them the fibrine never augments, supposing them free from all inflammatory complications, while in some forms of fever it is diminished to a degree not known in any other acute disease. Such fevers are termed adynamic, putrid or typhus. In them the blood seems tending towards a sort of dissolution. Whatever be the form of fever, the serum and clot are imperfectly separated; the clot is voluminous, is never elevated upon its borders, as in the phlegmasiæ, is of slight consistence, and easi-

ly broken and torn. In the adynamic form, it may often by the slightest pressure be reduced to a true condition of diffluence, in which it ceases to form a single mass, and is divided into a number of grumous portions which mix with the serum, and color it of a more or less deep red. In the early stage of these fevers the proportion of globules is often increased. M. Andral was formerly disposed to regard this high cipher of the globules as characteristic of the blood in the pyrexiæ, but he recants this opinion in the work before us. He continues his history of the blood of febrile patients in the following passages:

"There is another quite negative character of the blood in the pyrexiæ, which is of importance, and which serves still more to distinguish the sanguine fluid of these diseases from that of the phlegmasiæ. This character is the absence of the buff. I may affirm here that I have never met with it, unless there was some phlegmasial complication, either in inflammatory fever, in slight or severe typhoid fever, in measles, in scarlatina, or in variola."

"Since the diminution of the fibrine does not exist necessarily in any pyrexia, it is perfectly clear that it is not in this alteration of the blood, that we should place the point of departure of this class of diseases. But what seems to me incontestible, is, that the specific cause which gives them birth, acts upon the blood in such a way that it tends to destroy its spontaneous coagulable matter, while the cause which produces the phlegmasiæ tends on the contrary to create in that fluid a fresh proportion of that matter. If this cause act with slight energy, or if the economy resist it, the destruction of the fibrine is not accomplished; if, on the contrary, the cause continue to act with all its intensity, and the forces of the organism be in fault, the destruction of the fibrine will commence either at the very beginning of the disease, which is very rare, or a certain period after its commencement: all this applies itself equally well both to typhoid fever, and to the eruptive fevers. For me there is, in all these cases, a true intoxication; if it be slight, its effect must to be sure always exist, but it is not appreciable; if the intoxication be stronger, the effect which it has produced upon the blood becomes visible, and is marked in that fluid, by a diminution of the fibrine."

In this state of the blood we have a satisfactory explanation of the frequent occurrence of hemorrhages which has been remarked in protracted fevers, and especially in those of an adynamic type. The same condition of that fluid is found to exist in those cases of scarlatina, in which there are abundant losses of blood from all parts, and also in persons attacked with acute purpura hemorrhagica. Of the latter affection a striking case occurred in our practice a little more than a year ago. A young woman, 20 years of age, whose health had been pretty good, though not robust, found herself unusually indisposed about her monthly period. The menstrual discharge being too profuse and continuing beyond the ordinary time, her health failed her, and she was obliged to take to her bed. On the 8th day of the uterine hemorrhage her friends were alarmed by the appearance of a new symptom—she began to discharge blood from the mouth, which on examination was found to proceed from the gums. The blood was of a dark color, and formed a soft coagulum. On the next day we saw her, and found her with a rapid, soft pulse, offensive breath, anxious expression of countenane, constipated bowels, and complaining of precordial distress. The metorrhagia continued, and she was losing blood from her gums at the rate of 12 ounces in twenty-four hours. Three days after we first visited her, and on the twelfth of the disease, she died, petechiæ having appeared on her body and extremities, and her skin, especially the face, having assumed a livid hue. The treatment consisted of purgatives, quinine and stimulants, with remedies, general and local, addressed to the hemorrhage. No benefit appeared to be derived from any of them. The uterine hemorrhage rather augmented during the last days of her illness, and no astringent checked the bleeding from the gums.

M. Andral did not find that the animal temperature was lowered by a loss of a portion of the fibrine of the blood, any more than by a diminution of the globules. It is even much augmented in fevers where occasionally the blood offers not more than $\frac{1}{1000}$ in fibrine. In intermittent fevers the hu-

man temperature, according to this author, attains its maximum, and here the fibrine of the blood remains in a normal quantity.

Of the Blood in the Phlegmasiæ.—Having shown that in fevers the fibrine may be natural in quantity, or diminished, but never increased, our author proceeds to state, that in cases of inflammation this principle is invariably found augmented. This characteristic is never absent in the blood of persons afflicted with inflammatory diseases. The words of M. Andral are:

"In the phlegmasiæ, then, there is an excess of fibrine relatively to the globules, that is to say the reverse of what takes place in typhus. Hence may be explained the physical properties of the blood drawn from a vein, in these diseases. While in the pyrexiæ, generally, the clot is bulky, flabby, and imperfectly separated from the serum, here, on the contrary, it is smaller, more dense, and of superior consistence; besides which, if the blood has been properly drawn, the clot will be covered with a buffy coat of variable thickness.

"I have already explained myself in regard to the value of the indications to be derived from the buffy coat. Except when it occurs in cases of anæmia, this production uniformly denotes a state of inflammation. I can cite in support of this assertion a summary of nearly eighteen hundred bleedings, in which the blood, examined by myself, never presented a buffy coat except in one or the other of two series of cases, those of anæmic patients on the one hand, and those of persons attacked with various acute or subacute phlegmasiæ, on the other. In the former, the buffy coat, which, indeed, is of moderate thickness, results from the great diminution of the globules, for the fibrine, although in its usual quantity, is nevertheless in excess, relatively to the globules. But in the phlegmasiæ the globules are neither increased nor diminished, while the fibrine having become redundant, the law which governs the formation of the buffy coat reaches its full development. Moreover, the fibrine of the new product entering into the composition of the buffy coat coagulates more slowly than the old, which is another cause favorable to the appearance of the buffy coat, since the gradual coagulation of the fibrine allows the globules to sink to the bottom of the vessel, leaving the fibrine above them, still dissolved, or suspended, in the serum."

Here then is the essential modification of the blood in inflammation—the creation of a new quantity of fibrine. In this consists the great difference of the blood in fevers and the phlegmasiæ. It presents itself if inflammation be developed in the progress of typhoid fever. But in this case it never attains to a high degree. Even in anæmic subjects inflammation is attended by this modification of the blood. So the conclusion is, that be the state of the system what it may, the supervention of an acute phlegmasia involves necessarily, and in every case, the increase of fibrine in the blood beyond its normal quantity. Our author continues:

"In man, when an acute inflammation is well established, the fibrine varies in quantity between 6 and 8; in a smaller number of cases it rises as high as between 8 and 9; and, more rarely still, exceeds the latter number, and reaches by degrees 10½, which is the highest number I have yet found representing the fibrine in phlegmasiæ attacking the human race, though in a neat affected with pneumonia I found it as high as 13. It must be remarked here, that since the physiological number representing the fibrine in animals is not the same as that for man, the increment in the former must not be judged of by the standards of the latter, but must be referred to the average obtained for each particular class of animals. Thus the physiological mean of the fibrine in dog's blood being only 2.1, the numbers 3, 4, and 5 obtained when this animal was attacked with inflammation, would, in the case of man, indicate a development of fibrine to be represented by much higher numbers. On the other hand, the physiological mean of the fibrine in the blood of horses and neat-cattle being greater than that of man, the number 13 indicating the quantity of fibrine in the blood of one of these animals, would, in the case of man, represent a much inferior quantity. These corrections are indispensable, if we desire profitably to apply to human pathology the results obtained from studying the pathology of other species."

The greatest development is in pneumonia and acute articular rheumatism. In them the augmentation has reached as high as 10½—more than three times the natural quantity. It is less in inflammations of the mucous surfaces. In mercurial stomatitis it is increased, and is shown by cases cited by

our author to be augmented in proportion to the extent and intensity of the inflammation. In one case of severe salivation he found the fibrine had risen to 6.6.

From this it is plain that we have erred in ascribing to mercury any power of dissolving the blood. On this point M. A. expresses himself to the following effect:

"Mercurial stomatitis, therefore, notwithstanding its specific nature, does not differ from ordinary inflammations in its influence on the blood; and yet it has been asserted again and again, that one of the effects of mercury introduced into the system is to bring about a state of dissolution of the blood, which is incompatible with an increase of fibrine. It is possible that this may take place after a prolonged use of the medicine, but assuredly such is not the case soon after its first exhibition. Consequently, when it is administered to combat certain acute phlegmasiæ, such as peritonitis, it is not right to assume that its antiphlogistic action consists in its producing in the blood a condition opposed to that which belongs to the inflammatory state. Nor do I find that this dissolving influence upon the blood which is claimed for mercury, has ever been demonstrated, in any alleged case, by a rigorous examination of that fluid. It appears to me that the opinion rests chiefly on a fancied analogy between the effects of mercury, and those of scurvy, upon the mouth."

We published the history of an interesting case of purpura hemorrhagica in the first volume of the Transylvania Journal of Medicine, February, 1828, and in looking around for the exciting cause of the disease, we hinted that it might have been excited by the use of calomel, which had been given by our directions to the extent of producing slight ptyalism. We were most reluctant, at the time, to admit the agency of the mercurial in provoking the hemorrhage, and are now fully convinced by the testimony of M. Andral, that it was quite guiltless in the case.

Having cited many special inflammations in which the increase of fibrine is conspicuous, our author continues:

"The increase of fibrine in the blood takes place from the very commencement of the inflammatory state. I have frequently had the same individual bled twice; the first time, on

the day previous to the inflammatory attack, and the second time, a few hours after its distinctly marked invasion. The first time, the fibrine of the blood was normal, the second, in excess. I have, thus far, vainly striven to determine whether or not the composition of the blood was modified, before the change denoting inflammation appeared in the solids; I have not succeeded, and my analyses have proved to me nothing more than the simultaneous origin of these two phenomena."

This change in the composition of the blood must in some instances be subsequent to alterations in the solids. Such is the inflammation from burns, where the solids are first to suffer,but where the blood is found to have undergone this modification. On the contrary, in articular rheumatism the change in the solids is slight, while the increase of fibrine is very great. Inflammation, our author hence concludes, is not a disease seated in the solids merely, nor yet a purely local affair confined to the solids.

Before dismissing this subject, the author speaks of the remedies by which excess of fibrine in the blood is corrected; and first of bloodletting.

"Amongst the various forms of this treatment depletion holds the first rank. I have then naturally to inquire how far bleeding, repeated more or less frequently, has the power of removing the excess of fibrine in the blood, rapidly or gradually. Now it is found that however repeated or abundant the bleedings, the fibrine increases none the less, if these bleedings are performed in the early stages of an inflammation of some intensity, or, in other words, at the period of the ordinary increase of the disease; on the other hand the inflammation does not prevent there being found, after each bleeding, a progressive diminution of the globules. It seems, then, that when once the blood has set about producing an excess of fibrine, no matter what is done, a certain time must elapse before this disposition is exhausted. Besides, this resistance of the fibrine to the action of depletions, and the development it acquires in spite of them, are perfectly in keeping with what takes place in the inflamed solid itself, and in the rest of the organism. The most copious loss of blood does not effect the immediate removal of the lesions of the solid; a certain space of time is always necessary for accomplishing this, and

for the extinction of the fever. So that the fibrine, the quantity of which in the blood represents the degree of inflammation, obeys the same law which makes the latter continue for a certain time, and pass through certain stages. Let it not, however, be thought that I deny the utility of blood-letting, when properly employed, in this class of diseases. Experience has taught me, that without removing them suddenly, it often abridges their duration, and conspires to bring about a favorable issue. I even admit that if blood be drawn at the very outset of the inflammation, while yet there is nothing more than congestion in the solid, and the fibrine of the blood hardly above its normal standard, depletion may stop the progress of the disease, and, in certain cases at least, render it really abortive. But if the disease be a little farther advanced, this will not be the case: it is not in the power of art to prevent a well-formed pneumonia from lasting seven or eight days at least, although it may prevent its being prolonged for a fortnight. You cannot arrest a well marked case of acute articular rheumatism within eight, twelve, and oftener, fifteen or twenty days; but by the use of blood-letting will more frequently see it arrested within the last named period, than if depletion had not been used."

Of the Blood in Hemorrhages.—Some of these are connected with no appreciable lesion of the solids, and must, therefore, have their origin in a change in the composition of the blood. This consists in a relative or absolute diminution of its fibrine. We see it in scurvy, purpura, typhus fever, &c. It is the reverse of what occurs in the phlegmasiæ.

"Hemorrhagic blood, as regards its physical properties, does not differ from that of the pyrexiæ. It never presents any buffy coat, without inflammatory complication. The clot is generally large, and never small, except in those cases of extreme poverty of the blood of which I spoke last. It is more commonly remarkable for considerable softness, and when the hemorrhage depends on a very great diminution of fibrine, the blood may be so little coagulable as hardly to form a veritable clot; or it may happen that, instead of this latter, there is nothing in the vessel containing the blood, except some disconnected lumps suspended in reddish serum. This is that state of dissolution of the blood of which I have already spoken under the head of the pyrexiæ, and which exists, more or

less, in all the diseases characterized by a general disposition to hemorrhage."

The alkalis produce this effect on the blood. Magendie threw into the veins of a living animal a concentrated solution of the carbonate of soda, and found that an almost fluid blood was the result, and that the symptoms during life were nearly the same as those observed in diseases in which the older writers admitted a state of dissolution of the blood. It has been declared by some authors that they have found an excess of alkali in the blood of persons who died of low fevers or of scurvy. Our author supposes the venom of the viper and various miasmatic substances may act by inducing this state of the blood.

It is worthy of remark that this dissolved character of the blood, if we may judge from the histories of epidemics by writers before the eighteenth century, was a much more common thing in ages past than it is at the present day. Those authors continually speak of dissolved and incoagulable blood, as a characteristic of the fevers of their times. Huxham, as quoted by Andral, describes very forcibly these appearances. In his narrative of the epidemic fever of Plymouth, he mentions that the blood did not present even a distinct coagulum, but the vessel appeared to contain simply a brown liquid, at the bottom of which was deposited a sort of reddish powder, formed by the separate particles of what should have been the clot. One cannot help being struck with the coincidence between this condition of the blood, and the hygienic circumstances which were in operation at the time. We find Erasmus, for example, writing towards the close of the sixteenth century, that "the inhabitants of London were every year, from spring to harvest, attacked by a malignant fever, which committed the greatest ravages in that city, and especially amongst the poorer classes."

"The supply of water," he adds, "fails the inhabitants; they have to seek it at a great distance from the city; the river water is carried upon their backs, and is so dear that the poor cannot procure enough of it to wash themselves, and keep

their houses clean. These houses are of wood, and very cold in winter, which makes it necessary to fill the rooms with straw. But as this cannot be often renewed, it becomes spoiled, and very injurious."

A striking case illustrative of what the old writers considered "a dissolved and putrid state of the blood," as quoted by our author from Huxham's Essay on Fevers. The subject of it was seized with alternate rigors and flushes of heat, his pulse was weak, and he had general debility. Four or five days after this, his breath was observed to be fetid; he was still going about, but suddenly, two days after, he fainted. It was found that his neck and hands had livid spots on them. He fainted repeatedly, his breath had become insupportably fetid, blood leaked from his gums, and a great many livid, violet and black spots appeared all over his body, on the trunk as well as the limbs. A violent hemorrhage broke forth from his nose, and blood dropped from the caruncle of one of his eyes; several livid pustules appeared on his tongue, and the inner side of his lips, discharging a thin bloody matter when they broke. A bloody dysentery came on—his pulse intermitted every sixth or eighth pulsation—the dysentery being restrained, his urine became tinged with blood. The blood drawn from him seemed a '*purulent sanies*' rather than blood, with a kind of sooty powder at bottom. Still, the patient recovered on a course of bark, with aromatic and astringent substances.

Maladies characterized by these symptoms now rarely appear, especially of the hemorrhagic type, and never except in sporadic cases, and scurvy has also ceased as an endemic disease.

Of the Blood in Dropsies.—While some forms of dropsy arise from disease of the solids, it is generally acknowledged, says, M. A., "that there are others again whose point of departure must be sought for in an alteration of the blood." This has been said to consist in an impoverishment of that fluid. What is meant by that expression? The blood may be degenerated by a loss of fibrine, globules, or albumen. In all

such cases, that fluid may be said to be impoverished. Is dropsy equally the result of each condition? We have seen that diminution of fibrine does not lead to it, and our author correctly objects to its being a result of the loss of the globules ,that it is not common in chlorotic cases, nor in cases of spontaneous anæmia in men. It is diminution of the albumen, then, which results in the production of dropsy. And here we have an explanation of the fact that in dropsy the urine is so often albuminous. Such is the character of that secretion whether the dropsy ensue upon scarlatina, exposure to cold, or insufficient alimentation. Sheep, upon a bad diet, and in low situations, become dropsical, with blood deficient in albumen.

Of the Blood in Organic Diseases.—In five cases of hypertrophy of the heart, M. Andral found the albumen and globules normal—the fibrine in one was as high as 4. In this there was a rheumatic complication. No increase of this principle is found unless inflammation be present. It is not augmented by the deposit of tubercles, encephaloid, or scirrhous matter, a proof that in their first stage these productions do not lead to inflammation. "So long," remarks our author, "as tubercle and cancer preserve the character of hard masses, without any inflammation around them, an analysis of the blood uniformly gives the normal quantity of fibrine." This begins to increase only when the process of softening is set up, and inflammation is established. We have the proof of the fact in the following quotation:

"We weighed the fibrine obtained from the blood of thirty tuberculous patients, drawn at thirty-three different bleedings. In seven of these patients the tubercles were still crude; in nine others they were softening, and in the remaining fourteen, there were cavities in the lungs.

"The six patients of the first series were bled, altogether, nine times. Seven times the fibrine was found to be normal, varying between 2.7 and 3.5. Twice, however, the fibrine exceeded its physiological quantity, and gave the numbers 4.8 and 5.1. But, in each of these two cases, there was an in-

flammatory complication; in one a sub-acute entero-colitis, and, in the other, a bronchitis of much greater intensity than is usual in the first stage of phthisis.

"In ten bleedings performed on the nine patients of the second series, we already come to different results. Nine times out of ten the fibrine was in excess, sometimes very slightly, hardly reaching 4, and sometimes varying between 4 and 5. In the tenth case, there were only three parts of fibrine.

"In fourteen bleedings performed on the fourteen patients of the third series, the fibrine was in excess twelve times, but much more so than in the second series. The minimum found was 4.0, and that once only. In three other cases, the fibrine varied between 4.4 and 4.6; in all the others it was between 5.0 and 5.9.

"The only two cases of the third series which did not follow the rule of the increase of fibrine, must be regarded as exceptional; the subjects of them were far gone in marasmus, when we attempted, by a small bleeding, to diminish the state of half asphyxia which they presented; and, indeed, they were momentarily relieved by it. In one of them the fibrine was at its physiological mean, in the other it had fallen to 2.0.

"In the third stage of phthisis, therefore, although the fibrine is generally in excess, there are yet some cases, in which the exhaustion, consequent on the softening of the tubercles, is indicated by an opposite modification in the amount of fibrine; it augments during the process of elimination, and then diminishes, so as to fall even below the lowest limit of its physiological state."

We had wished to notice other parts of this original and instructive Essay, but find our limits are exhausted. We commend the subject of which it treats so ably, to the attention of all who are ambitious of keeping up with the progress of pathological science in this interesting quarter. Y.

ART. VII.—*A Memoir on the Means of Modifying the forms of Living Bodies by Regimen.* By M. HIPPOLYTE ROYER-COLLARD. Translated from the French of Dr. T. D. L. By JOHN BARRY, M.D., formerly Secretary of the Louisville Medical Society.

Anatomy and physiology have not made any considerable progress for the last twenty years except in the comparative study of man and the other organized species. Pathology has scarcely entered into this path. Hygiene, that branch of medicine which teaches the regulation of the life of man in such a manner as to obtain the free exercise of all his functions, and the complete development of all his faculties, hygiene is yet more backward in this respect than any of the other branches of the science; and yet more than any of them it may find in this study valuable and multiplied practical suggestions. Agriculture, the raising of live stock, the breaking and training of animals, has amassed during ages treasures of positive observations and the results of ready-made experiments. The most ignorant farmer in the country possesses knowledge which science neglects, an odd mixture of truth and errors, a rude product of an empiricism often gross, but sometimes inspired by genius. It is from this prolific source that M. Hippolyte Royer-Collard, Professor of Hygiene in the Parisian Faculty of Medicine, has drawn when proposing to modify artificially the forms of living bodies by means of regimen, a new and original problem in its application to the human species, and which became the subject of a memoir which the Academy of Medicine has highly extolled.

The author at first examines the vegetable kingdom and there finds undeniable proofs of the numerous manifestations of human power. Every body knows how a particular alimentation modifies the different parts of a plant. Here the stamens are changed into petals; then the same plant removed back into a poor uncultivated soil presents only simple

flowers. There the operation of *pinching* turns from their destination the nutritive principles, so that fruit eyes are produced in place of leaves. In other cases roots are transformed into branches or branches into roots. The influence of manure on plants is well known. The root of the wild carrot is naturally slender and coriaceous. M. Vilmorin has discovered the manner of progressively developing and changing it so as to make it thick, juicy and fleshy.

Directing next his attention to the animal kingdom, M. Royer-Collard remarked how many important lessons are offered by the natural history of domestic animals, when these animals are examined in all the conditions in which they are daily placed by human industry. He cites the remarkable experiments of Bakewell, of Dishley, in England—the farmer who undertook to create, if the expression be allowable, a breed of oxen which should have no equals in the world. It is to him that is due the breed of the large horses now used for draught in London. It was he alone who obtained from his sheep, at Dishley, the union of the two qualities which theoretical agriculturists considered incompatable, viz: fineness of wool, with development of the fleshy parts. His art, at first purely empirical, became at length a system founded on principles. For the last fifty years the plan of Bakewell has been adopted throughout Europe. Regimen, considered as an art, has arrived at an astonishing degree of perfection. What animals are proper or improper for fattening are now known by certain signs. What conditions are necessary for bringing them to the required degree of *embonpoint*. What kind of food produces fat, or muscles; what aliment increases the milk of cows, and the wool of sheep. We can exactly measure for each animal the nourishment, the air, the light, the exercise, it requires, in order to be brought to such and such a state, or to be used for such and such employment.

After these numerous examples of the influence of alimentary regimen on plants and on animals, we ought assuredly to conclude that a similar influence might also be exercised on man. In order to give more value to this induction M. Roy-

er-Collard looks for proof of it in the human species itself. In the earlier period of life the mode of alimentation of an infant determines the conformation of its osseous system. For a long time physicians have pointed out the danger of that mixed kind of alimentation in which pap or thickened milk is given to infants when there is a deficiency of the mother's milk. The greater part of the new-born children succumb under this regimen, and those which survive are exposed to rachitis.

In adult life or in the state of maturity, man may yet experience the influence of regimen on his organs. The training of boxers, of couriers, and of jockies presents remarkable examples. The information on this subject, which M. Royer-Collard has collected and which we are going to report, has been furnished him by the excellent work of Sinclair, and also from conversations with Lord Henry Seymore, the famous rearer of horses, and with Dr. Farral, an English physician of distinguished merit.

A boxer is a person of the age of 18 years at least, and of 40 at most. He enters the arena as far as the enclosure. His fists are closed but not armed. Placed before his adversary he waits for a given signal to commence the fight. Then the two champions let fly at each other vigorous fisty-cuffs from the head to the stomach. If one of the combatants be thrown down or stunned by the violence of the shock, nearly a minute of repose is allowed him; before the full minute elapses he arises and recommences the struggle, or if not, he is declared vanquished. Ordinary boxers during a combat of an hour and a half rest themselves in this manner from thirty to forty times. About fifteen years ago, in a fight between Maffey and McCarthy, which lasted four hours and forty-five minutes, one of the pugilists fell stunned 190 times. The duration of the combat is very variable; sometimes it does not exceed a few minutes, sometimes it extends to three, four, and even five hours. It will be easily conceived that serious injury and even death may be the result. Sad examples of this have been seen, but fortunately they are extremely rare. More frequently there remains after a few days no

trace of blows so terrible—a remarkable circumstance. It may be said, without exaggeration, that in general the fights of boxers no more expose life or even health than a number of other pursuits which are not considered as being dangerous. Prodigious strength, singular address, an insensibility to blows which exceeds all belief, and at the same time, perfect health, these are the phenomena presented by these men, assuredly very different from those offered by the rest of their fellow men. How are they thus modified? It is by the preparations they have undergone, by the instructions they have received, the *training*, the *condition*, to speak their language; that is, by the regimen.

Previously to entering on 'condition' a boxer for example, weighs 128 pounds, at the end of a few days he weighs no more than 120. A short time after this he weighs again 128 pounds, sometimes more, sometimes less, according to his organization; but his muscles are extremely augmented in volume. His muscles are now firm, prominent, and very elastic to the touch; they contract with extraordinary force under the influence of the electric shock. The prominence of the abdomen disappears, the chest becomes expanded and obtrudes forward; respiration is full, deep and capable of long efforts. The skin is become very firm, glossy and transparent; much importance is attached to the latter condition. When the hand of a man fully prepared is placed before a lighted wax candle, the fingers appear of a beautiful rosy transparence. It is remarkable that the portions of the skin which cover the arm-pits and the sides of the chest do not tremble during the motions of the arms. They must on the contrary appear perfectly adherent to the subjacent muscles. This firmness of the skin resulting from the absorption of the fat opposes the extravasations serous or sanguineous which ordinarily are produced by blows. This is also an essential condition. In 1740 the famous boxer Broughton, after uninterrupted victories for sixteen years, lost the pugilistic crown for having one time omitted to submit to the necessary course of training. He received on the forehead a stroke which produced such a swelling that he was unable

to open his eyes. He had become gross and plethoric; his skin had become soft and distended. Training would certainly have removed these inconveniences. The memorable fight which took place in 1814 between the boxer Cribb and the negro Molineaux is also adduced. Bets were made to the amount of £50,000 sterling. Molineaux being of colossal stature and herculean strength, refused to prepare himself. Cribb, on the contrary, found himself in unfavorable circumstances, he was fat and weighed 188 pounds. After three month's training under the direction of Captain Barclay, he was reduced to 152 pounds. The conflict was not long doubtful. The face of Molineaux soon became the seat of considerable tumefaction, and the struggle could not be continued.

The regimen of couriers during 'condition' is in some respects analogous to that of boxers. In other respects it is different, the object not being the same. In the latter case the prime object is to augment the strength; in the former it is wished to diminish the weight of the body, and at the same time to increase the power of respiration. For the courier the result of training is as certain as for the pugilist. A courier after two day's training diminished in weight 18 pounds, and after five days 25 pounds. A man who weighed 120 finds himself commonly reduced in 16 days, and even in a shorter time to 80 pounds. It is known with certainty what will be best from one day to another. At the close of such training, the courier is become not only less heavy but more strong and enduring. Previously to being prepared he could not run a mile without losing his breath, now he can easily run twenty-five miles. There are in England runners who make twenty-five miles backwards per day during six weeks. The runner Torensed has in the same manner gone from London to Brighton (62 miles) in eight hours. At another time he went 100 miles in twelve hours, running one half and walking the other.

With respect to jockies their regimen is far from being so favorable to health. It is proposed solely to lessen their

weight, and this object can seldom be attained but at the expense of their strength. Therefore many of them sink early or late under the treatment, whilst boxers, whose lives are sober and regular, are remarkable for their longevity.

M. Royer-Collard concludes his memoir by making known the principles of training. The regimen, which is continued for a longer or a shorter period, according to the object in view, and the state of the person who is to be submitted to it, consists, in the case of boxers and couriers, of two distinct and successive operations. The trainers commence by depriving the body of the fat, and of the superfluous fluids contained in the cellular tissue. These objects are attained by purgatives, by sudorifics, and by low diet. They insist on the employment of these means much more in the case of the courier than in that of the boxer. If they ended with this first result as is commonly done in the case of the jockey, it is evident that the evacuations would enfeeble the most robust man, but the trainers soon pass to the second operation, the object of which is to develop the muscles, and to give more energy to the nutritive functions. These ends are obtained by gradual and regular exercise combined with a proper system of alimentation. He who is to run is not fed like the person prepared for boxing. The first is allowed only a small quantity of aliment, rather exciting than substantial. For the second, choice is made of such aliment as under small volume, furnishes to the organs, materials essentially nutritive, that is to say, after having evacuated all the subcutaneous useless parts, the nutritive action is directed to the muscles; these now almost solely engage attention.

Finally, the moral dispositions are objects of particular care. The person being trained is always accompanied by the trainer, whose object is to amuse the former with pleasant and agreeable stories and to keep away from him all circumstances which may excite anger or impatience. In a word he is taught *sang-froid*, courage, equanimity, qualities as necessary in the combat as muscular force itself.

After so many testimonies accumulated by M. Royer-Col-

lard on the efficacy of training, nobody can now doubt the efficacy of this art, which consists in our seizing in some manner on the nutritive power, and directing it to a determinate object; to change sometimes in one sense, sometimes in another, the intimate structure of organs without employing any other means but that of the regimen. This principle once admitted and well understood, how many forms or different degrees of health could be happily modified by a systematic regimen which would only require patience and submission.

Marion county, June, 1844.

ART. VIII.—*The Cyclopædia of Practical Medicine.* Edited by JOHN FORBES, M.D., F.R.S., ALEX. TWEEDIE, M.D., F.R.S., and JOHN CONOLLY, M.D. Revised, with additions, by ROBLEY DUNGLISON, M.D. Parts V., VI., and VII. Philadelphia: Lea & Blanchard. 1844.

With great regularity a number of this learned and valuable work appears every two weeks. We have now before us parts 5, 6, and 7, completing the first volume, and furnishing 136 pages towards the second. The number of topics discussed in these three numbers is fifty, in which is included croup and feigned diseases, and all the maladies beginning with the letters between these two. In these articles will be found a summary of all the practical knowledge extant in relation to the diseases treated of. If some complain that it is not as full as it might have been made, we suspect that its compression within such reasonable limits will be rather a recommendation of the work with the physician in active practice. As a cyclopædia of practical medicine, when completed, it will constitute an invaluable repository of medical knowledge. We hope the publishers are rewarded for their enterprising spirit in bringing out the work in so creditable a style. Y.

SELECTIONS

FROM

AMERICAN AND FOREIGN JOURNALS.

Lectures delivered in the Theatre of St. George's Hospital, in the session of 1843'–44, by Sir Benjamin Collins Brodie, *Consulting Surgeon of the Hospital.*

Diseases simulating nasal polypi. Diseased ethmoid bone. Diseases of the tongue. The tongue after salivation and syphilis. Disease simulating cancer of the tongue. True malignant disease of the organ. Removal by ligature. Malignant disease produced by ulcers of the tongue. Ranula. Advantages of a metallic seton over one of silk.

DISEASES WHICH ARE SOMETIMES MISTAKEN FOR POLYPI OF THE NOSE.

Gentlemen: I have a few words to say concerning these diseases. The case that I shall first mention is a very common one. A young person, frequently a child, is brought, having dilated pupils, a fair complexion, and thin skin, with some difficulty of breathing through the nostrils, and perhaps rather more secretion from them than usual. On looking into the nostrils the Schneiderian membrane appears very turgid, more vascular than ordinary, and on the outside there is a tumor, an excrescence, sometimes small, or at other times pretty large. This may be mistaken for a polypus, and, indeed, the disease puzzled me when I first saw it. This appearance, however, is produced merely by the thickening of the mucous membrene of the nostril at the anterior extremity of the inferior turbinated bone. I do not believe that the mucous membrane there is really more thickened than it is anywhere else; but it is more apparent in that situation on account of the projection of the bone.

In some cases in which the mucous membrane has been sufficiently thickened to obstruct the respiration through the nostril, I have introduced a pair of probe-pointed scissors, slightly

curved, and snipped off a portion of the projecting mucous membrane. There is no harm whatever in its excision; and where the nostril is much obstructed, the operation affords great relief. You may suppose this to be a very simple operation; and so it is, for it is done in an instant, but yet it requires some care in order that it may be done properly. In the dead body you might snip off a bit, and if you had not completed it by one incision you could make another. But in the living subject the mucous membrane is full of vessels, and the part must be snipped off at once; for the moment one division is made with the scissors, the hæmorrhage is so great that you cannot see a bit of the remaining part which requires to be divided. It is only every now and then that you find it necessary to have recourse to this operation. In other cases give the child small doses of steel for three weeks, then suspend its exhibition for a fortnight, and again resume it, and proceed in this manner for three or four years. Delicate children who are liable to this disease of the Schneiderian membrane are always benefited by the exhibition of steel; it should, however, be given not in large doses for a short time, but in small ones long continued. Where the constitution is weak, you may sometimes cure the disease in three weeks, but the rectifying of the constitution is a work of years. Some good may be done by local treatment. Dissolve two grains of sulphate of zinc in an ounce of rose-water, and inject a portion into the nostrils two or three times a day; or paint the inside of the nostril with diluted ung. hydrarg. nitratis by means of a camel-hair brush.

I have seen some cases in which a small abscess has formed in the tumor that I have just described. Suppuration has taken place in the substance of the Schneiderian membrane just where it projects in front of the inferior turbinated bone, and the best plan to adopt is to cut off, with a pair of scissors, membrane and abscess together. When an abscess forms in a pile, that is best relieved, not by laying open the abscess, but by snipping off the pile.

Another disease, sometimes mistaken for polypus of the nose, is connected with a morbid condition of the ethmoid bone. A patient has difficulty of breathing through the nose, with pain in the forehead, and blows his nose oftener than natural; by and by he blows away hard dry scabs of mucus, like bits of glue, and then there is an offensive putrid smell perceptible to others, and perhaps to himself also. This indicates disease in the bones of the nose, generally of the ethmoid cells, but sometimes more extensive. Occasionally it is

supposed to supervene on syphilis, sometimes it arises from the long-continued use of mercury; sometimes from a scrofulous state of the system; or it may be the result of general bad habit, such as is called *cachexia*. I am not about to enter into a history of this disease at present, but merely to point out that it may be mistaken for polypus. The symptoms always show that it is not a polypus, and if you turn the patient to the light you will see a tumor at the upper part of the nostril. This consists merely of unhealthy granulations, organized lymph covering the Schneiderian membrane over the bone; and if you take hold of it with the forceps you do not pull away a polypus, but a bit of the Schneiderian membrane with the tumor over it. Take care not to mistake this case for polypus, because the treatment that is applicable to the one is quite inapplicable to the other.

Having finished this subject, I propose to call your attention to

Diseases of the Tongue.—I am inclined to direct your attention to this subject, first, because you will find, especially in private practice, that you are frequently consulted about diseases of this organ; and, secondly, there is nothing worthy of notice about it in books. I have at different times looked over various books on surgery, and over the journals and surgical reviews, but I have not been able to gain any information about diseases of the tongue, except those of a malignant character; and I must add that the history given, even of these, odd as it may seem, is very different from what I have met with in practice.

In dyspeptic persons the tongue is frequently rather swollen; it becomes cracked on the surface, and may remain so without harm for years. It may bear the appearance of fissures on the surface, and the papillæ may be enlarged. This dyspeptic tongue, existing in a slight degree, is very common. A similar appearance of this organ occurs in persons who have been much under the influence of mercury. When a patient is salivated, the gums become inflamed, and the tongue also becomes inflamed and swollen. In bad cases of salivation, such as you scarcely ever see in the present day, because mercury is more prudently exhibited than formerly, the tongue becomes so swollen that the mouth will not contain it, and this inflammatory state of the organ, arising from the use of mercury, is very apt more or less to persist afterwards. The tongue is swollen; there are fissures on the surface, and this appearance is retained to the last. Sometimes you will see a longitudinal fissure in the median line of the tongue

which does not seem to swell up like the rest of the organ. I remember a patient who had thus suffered from the use of mercury; and for a long time afterwards his tongue was much enlarged. The longitudinal fissure was so deep that it looked as if the tongue were divided into two parts, and the patient consulted a medical practitioner, who, not being acquainted with the disease, thought the tongue was going to drop into two pieces, and proposed to fasten it together by a ligature.

This morbid condition of the tongue requires no special treatment. If the patient be dyspeptic, try to put his digestion in as good a state as possible. When he suffers from the use of mercury, give him sarsaparilla, nitric acid, or whatever else may get rid of the effects of mercury.

There are ulcers of the tongue which are different from those I have just mentioned; sometimes they accompany an enlarged and fissured tongue, but they may exist independently of those circumstances. The ulcers to which I now allude, more especially, occur as one of the sequelæ of syphilis. They are sometimes accompanied by the eruptions, little spots of syphilitic psoriasis on the body, and little spots on the scalp, but frequently they occur without symptoms elsewhere. A gentleman whom I saw not long since had a chancre in the spring of the year, some few years ago. Two or three months after that, if I remember aright, he had secondary symptoms. He took mercury, but inadequately; and many months afterwards the secondary symptoms returned; they were, however, but slight, and yielded to some simple treatment. But a year and a half after the first attack of syphilis, there were ulcers of the tongue, so that he could hardly speak or swallow his food; and at the same time spots appeared on his head and elsewhere. He took a little mercury, his tongue got well, and the eruption disappeared. From that time, however, he was subject continually to little ulcers of the tongue, coming but not going of themselves, never disappearing till he had taken blue pill. The ulcers, of which there were several, were very troublesome, interfering with deglutition, nay even making him speak thick, and occasioning him great distress. Of his own accord he took a little mercury when they appeared, and they went away; but in two or three months they were sure to return. At last I made him take a course of grey powder (hyd. c. creta.) for nearly two months; the ulcers healed, and never troubled him again. These cases are very common as a sequel of syphilis, and the ulcers are seldom cured, except by mercury;

but, according to my experience, large doses of it do harm rather than good. Calomel and opium is the great medicine to be brought into play in these cases. The mercury with chalk, five grains, with one or two grains of Dover's powder (to prevent it from griping and purging), is preferable to any larger doses of the remedy. The length of time during which a person may be plagued with ulcers of the tongue is astonishing. I have seen them last for years, until a patient has been put through a pretty long course of small doses of mercury. I saw one gentleman in whom these ulcers followed syphilis, and had been going on for two or three years when he came to me. They yielded to the grey powder, but not very rapidly, and the tongue always continued disfigured and covered with cicatrices. In some cases the patient is relieved by sarsaparilla, especially an infusion in lime water. Where mercury has failed I have found that the best remedy is iodide of potassium, two or three grains given twice daily, dissolved in plenty of water; but, in three cases out of four, the grey powder is much more efficacious.

Ulcers of the tongue, such as I have described, sometimes occur merely as accompaniments of dyspepsia, and they generally heal of themselves; but if they do not, one application of the nitrate of silver is generally sufficient to remove them. Those, however, that follow syphilis, do not yield to this remedy; nor does any local application, so far as I have seen, do much service.

Some persons who have ulcers on the tongue have them also on the inside of the cheek. I suspect that they are originally little eruptions, but as they occur in a mucous membrane they ulcerate more rapidly than they would if they occurred on the skin.

There is a disease of the tongue which I have seen every now and then, and which I am sure is very often mistaken for cancer, though it is of a different nature. It is a curable disease, although it looks like a malignant one in many respects. The first thing of which the patient complains is enlargement of the tongue, with some pain. On examination you find a tumor in one part of it, not very well defined, not with any distinct margin. It is a softish tumor, and increases in size; and perhaps another tumor appears in a different part of the tongue, and that increases also. There may be three or four of these soft elastic tumors, with no very defined margins, in various parts of the tongue. This is the first stage of the disease.

In the second stage there is a small formation of matter in

one of these tumors—a little abscess, which breaks externally, discharging two or three drops of pus. When the abscess has burst it does not heal, but another forms in one of the other tumors. These abscesses may assume the form of ulcers, and the ulcer has a particular appearance. In the first instance it is a very narrow streak of ulceration, but on introducing a probe you find that the ulcer is the external orifice to a sort of fissure in the tongue. The probe passes in obliquely; the tongue is, as it were, undermined by the ulcer, a flap of the substance of the tongue being over it.

The disease now becomes more painful, and at last these ulcers may spread externally. In some instances they occupy a very considerable portion of the surface of the tongue, but generally they burrow internally, and do not spread much towards the surface. This is a very distressing state of things, and a man may remain in this state for a long time. The glands of the neck do not become affected, nor does the general health suffer, except from the difficulty of swallowing food. This is one inconvenience experienced by the patient, and he also labors under a difficulty of articulation. The tongue, from its enlarged state, may become stiff, not sufficiently pliable for the purposes of speech, and the patient either speaks thick or lisps.

In some instances the disease may be relieved by a course of sarsaparilla, with small doses of bichloride of mercury. A strong decoction of sarsaparilla, with from a quarter to half a grain of bichloride of mercury, may be taken in the course of the day. Of course, if there be anything wrong in the general health, you should endeavor to get that corrected, and attend especially to the state of the bowels and the secretion of the liver. If the secretions of the digestive organs be unhealthy, a dose of senna and salts may be given every other morning, and blue pill every other night. When the patient is brought into this state, one remedy, as I have said, is sarsaparilla with bichloride of mercury, but, according to my experience, this is not the best remedy. The remedy best adapted for these cases is a solution of arsenic. Give the patient five minims three times daily, in a draught, gradually increasing the dose to ten minims. It should be taken in full doses, so that it may begin to produce some of its poisonous effects upon the system. When it begins to act as a poison it will show itself in various ways. Sometimes there is a sense of heat, a burning pain in the rectum; sometimes griping, purging, and sickness, and nervous tremblings. A patient who is taking arsenic, especially in pretty large doses, ought

to be very carefully watched. At first you may see him every two or three days, and then every day; and as soon as the arsenic begins to operate as a poison, leave it off. When this effect is produced, the disease of the tongue generally gets well, but at any rate leave off the arsenic, and the poisoning will not go too far; it will do no harm. If, after a time, you find that the disease is relieved, but not entirely cured, you may try another course of arsenic. Perhaps it may take a considerable time to get the tongue quite well. Sarsaparilla, with the bichloride of mercury, may be given at one time; and at another, arsenic. You cannot give either of these remedies forever, and indeed the arsenic can only be given for a very limited period; but it is astonishing what bad tongues of this description I have seen get well under these modes of treatment, especially under the use of arsenic.

Malignant diseases of the tongue generally are of the nature of carcinoma, but sometimes of fungus hæmatodes.

Carcinoma generally begins with scirrhous tubercles in the tongue, which may be felt externally; but, from the dissections I have made, I suspect that the disease never begins in one part only; that while there is one tubercle that can be felt, there are others that cannot in various parts of the organ. The scirrhous tubercle increases, becomes attached to the skin, and ulcerates. It may commence in part of the tongue; sometimes the upper part, sometimes the end, and sometimes the lower surface.

Such is the history of the disease as it is commonly given in books, and as it frequently occurs in practice; but I must say that it does not always begin in this manner; and that in many cases a disease which you do not think of any consequence turns out to be malignant. For example; a gentleman came to me with a little round ulcer, not so large as a silver penny, and it gave him no pain. I touched it with the nitrate of silver, and used some other remedies, which I now forget, for it was many years ago. I proposed to remove a part of the tongue by ligature, but he did not like to undergo the operation, and went into the country. I saw nothing of him for three-quarters of a year, and he then came back with an immense ulcer of the tongue. The tongue was much enlarged, and also the glands of the neck. He died, and I made a post-mortem examination. I found an enormous tumor, fungus hæmatodes of the tongue, extending to the epiglottis and the glands of the neck. The only external manifestation of this, in the first instance, was a little ulcer, without surrounding hardnesss, and which yielded to the touch. I

have seen fungus hæmatodes of the glans penis begin in the same manner; it would not heal, and by and by the tumor burst out. A gentleman consulted me about two years ago with some little excrescences on the side of the tongue, which looked so very like warts, that I thought they were so; and I apprehended the disease was malignant, especially as it appeared to be confined to the surface. I am always suspicious of diseases of the tongue. I applied some caustic potassa to the warts, which destroyed them very effectually, and made a deep ulcer there. The part healed, and the patient seemed to be very well. He came to me sometime afterwards with ulcers where the warts had been; there was a great deal of hardness at the base, and they had all the characteristics of carcinomatous ulcers. So they proved to be; the disease continued to spread, there was repeated hæmorrhage, and the patient died. In other cases I have seen disease of the tongue, which did not present a suspicious character at first, prove to be malignant in the end.

There are on the table specimens of malignant disease of the tongue illustrating the progress which I am now going to describe. The ulcer extends, eats away a good bit of the tongue, generally on one side; the organ becomes stiff, gets fixed to the neighboring parts; deglutition and articulation become difficult; the patient complains of pain, and you cannot help him. The ulceration goes on; the constitution suffers from the influence of malignant disease, and also from the want of nourishment; the glands in the neck become affected; and I do not know anything more miserable than a patient dying of malignant ulcer of the tongue. Having described the progress of the disease so far, you can easily conceive the rest. The patient is gradually rendered weaker and weaker, thinner and thinner; then there is a great bleeding; the lingual arteries are ulcerated, and it may be that the patient dies of hæmerrhage, for you can do nothing to stop it except by the actual cautery, and that you are often not in time to apply. The repeated hæmorrhages in these cases generally go a great way towards the destruction of the patient.

In the advanced stage of the disease nothing can be done. Can anything be done in the early stage? Can you remove the scirrhous disease in any way? If it be situated at the anterior part of the tongue you may excise it. An assistant could hold the tongue with a rough towel on one side while you excise the other, and he could also hold it while you secured the bleeding vessels by ligature. But a much simpler way would be to remove the part by ligature. A strong liga-

ture, with a double needle, may be passed through the tongue, and it may include as much as you please. If there be a large portion to be removed, make a notch with a pair of scissors behind and before; into which the ligature can drop so as to enable you to effect the strangulation more completely. It gives a great deal of pain at the time you apply the ligature, but you must have a very strong ligature, and tie it as tight as possible. The part introduced between the ligature is immediately killed; it assumes a purple and then an ash color, and in the course of a few hours the pain is over; but profuse salivation follows, and in some cases lasts two or three days.

There is no difficulty in removing, either by the knife or by ligature, any tumor from the tongue, except it be situated just at the back; but then I must tell you that I never saw any permanent good arise from it in any one instance. In the examinations I have made where there was carcinoma of the tongue, the scirrhous disease was beginning in other parts. A woman has a scirrhous tumor of the breast—do you think that you would succeed in curing the disease by cutting away a portion of the breast and leaving the rest? You have no chance of the operation succeeding, except you remove the whole, unless the scirrhous tumor be distinct with a cyst around it, and have no connection with the breast. If there be fungus hæmatodes of the tibia, no surgeon of sense would think of performing amputation, except above the knee, even if he did it there. In order that an operation for malignant disease may be successful, you must remove the whole of the organ in which it is situated, otherwise there is no chance of permanent good. In the case of malignant disease of the tongue, you cannot remove the whole, but only that little bit in which it has shown itself, while there is an under-current of disease going on everywhere else. I therefore cannot recommend you to perform the operation, and I think it is better to let a disease like this take its course, than to subject the patient to the pain of an operation, and, what is worse, to the disappointment. The patient goes through the operation, and then, in a little while, he is disappointed to find that he is just as bad as ever.

I cannot say that those small ulcers of the tongue which I described before, never run into malignant disease. I suspect that any ulcer there, that has existed for an indefinite time, may assume the character of malignant disease. A patient had ulcers of the tongue and cheek; he was apparently dyspeptic, and, so far as I know, they were not connected with syphilis. He had been subject to them for years, and they

generally yielded to some remedies; but at last I was called in to see one of the ulcers unusually intractable in the cheek. It had become malignant, and the patient died of carcinoma of the cheek. Where there are ulcers of the tongue, take care that there are no external causes of irritation acting upon them to keep them up; for this will sometimes convert a simple into a malignant ulcer. Teeth, scarifying ulcers in the tongue, should be extracted. In many cases, rough, ragged teeth, produce disease of the tongue. In malignant disease, I have over and over again, had the teeth extracted, while the event has proved that they might as well have remained; but still, when there is a sharp tooth cutting against the edge of the tongue, you are always to look at it with great suspicion.

There is one other disease of the tongue, or rather a disease under it, which remains to be mentioned. A patient comes with a sore mouth, and you see the tongue pushed up to the soft palate. It looks as if the tongue were enlarged, but that is not the case, it is lifted up. You tell the patient to put his tongue against the incisor teeth, and on looking beneath, you see a tumor. By feeling it, you find fluctuation; you puncture it, and let out a quantity of transparent fluid, sometimes a teaspoonful or more. The fluid is a little glutinous, and consists of saliva. There has been an obstruction to the orifice of the submaxillary gland; the saliva has been secreted by the gland, but could not get out by the duct, and hence it has remained till it has formed a large tumor. This is what is called ranula.

You puncture the tumor with a lancet; the fluid comes out, and immediately the patient is well. You see him a week afterwards; he is quite well, and there is the saliva flowing out of the orifice you have made with the lancet. But you see him a month afterwards, and the tumor has re appeared, the orifice has healed, and the tumor becomes as large as ever. All you want is, to get a permenent orifice from the bag into which the duct has been converted; but that is a very difficult matter. I have tried to effect it in various ways. I have punctured the bag, and then touched the edge with caustic potassa, to prevent its healing. The patient has gone on very well, so long as it did not heal, but as soon as I have left off applying the caustic, the orifice has closed. I have introduced a tenaculum into the bag of the ranula, and cut away a piece sufficiently large to admit the finger; the patient has then continued well for a longer time, because the part takes longer to heal, but contraction takes place, and the patient is bad again. I have run a seton through, and the patient has

then gone on well for a considerable time. I have introduced a gold or silver ring, and kept that in as a seton. If the seton be kept in a considerable time, it seems to effect a permanent cure, but even that fails, and you have to perform the operation two or three times. I know of nothing better than the use of a seton, and I believe that it is better made of metallic substance, than of silk. It does not so soon ulcerate its way out, and if it remain in for a long time, the edges of the orifice through which the seton is introduced, may become covered with mucous membrane. If you introduce a silk or India rubber seton in the back of the neck, after a great length of time a sort of skin forms on the inner surface of the canal; there is a discharge of matter; and when you take away the seton, the part in which it lay remains pervious. So if you keep a seton in a ranula, for a very long time, the opening may remain pervious. The advantage of a metallic over a silk seton, is, that it does not ulcerate its way out so soon, does not get putrid in the mouth, and, therefore, may be kept in for a longer time.—*London Lancet.*

Sulphate of Quinine in Yellow Fever.—When I determine to administer sulphate of quinine, I order it in doses of two grains every hour for adults, until the system is saturated, which may be recognised by a species of intoxication and partial deafness, too well known to attend the exhibition of this medicine to be mistaken.

I believe that in a great number of cases where patients have been cured after having the quinine, the cure might have been obtained without the use of this remedy; but why neglect an agent which, were it only auxillary, always has the advantage when we employ it opportunely, to confirm a cure which, without it, would remain doubtful. I have sometimes attempted to dispense with its use, and in some few cases I have had reason to deplore its omission, for I had the misfortune to lose some patients in whom the remission was so complete, that the administration of quinine might certainly have effected a cure.

Heretofore the administration of the sulphate of quinine, as an anti-periodic during the remission, has not been called in question. But this is not the only mode of exhibiting this medicament; there is another of which I must speak. During the epidemic of 1841, I reflected whether instead of waiting until the remission was complete and permanent, to adminis-

ter the sulphate of quinine, it would not be as natural and more efficacious to administer this remedy *de prime abord* during the short remission produced by a large syncopal bleeding.

Let me illustrate the position:—Suppose an individual in the onset of yellow fever is as stout as we could wish; a general bleeding is practised upon him, and this bleeding, when pushed to incipient syncope, induces all that series of phenomena which I have described above—phenomena which, in their *ensemble*, constitute a temporary but genuine remission. Well, can we avail ourselves of this momentary calm to administer the quinine in doses sufficiently large to create a profound perturbation, and break up that morbid chain on which the disease depends?

Such was the question which I propounded to myself in 1841—one which I resolved to test by clinical experience. After much hesitation, I determined to try the experiment, and the subject on whom it was made, was cured as by enchantment. Encouraged by this result, I repeated the experiment a second, then a third, and the fourth time, and always with the same success.—Dr. Beugnot in *New Orleans Med. Jour.*

DR. DRAKE'S LETTER.

To the Editors of the N. O. Medical Journal:

Gentlemen:—You will greatly oblige me by inserting this note in the first number of your forthcoming Journal. I am in the 'lower country' as you know, collecting information on its topography, climate, and diseases; but of course shall not be able to visit every part of it, and must therefore make known my object to its physicians, through the press.

For many years I have had it in view to write a history of the prevalent maladies of the Mississippi Valley, but till within the last two, have been unable to make those personal observations which are indispensably necessary to the collection of the required facts and observations. In my visit to a part of the South-west, last spring, the courteous liberality of its medical gentlemen enabled me to amass much valuable *materiel;* but I need a great deal more, and as a visit to all

parts is of course impracticable, I shall have to rely to some extent on this mode of soliciting additional contributions.

The remittent and intermittent fevers of the country, especially those of a malignant character, and the yellow fever of the cities and smaller towns, are objects of deepest interest. In reference to the whole, I ask for facts, rigidly observed and concisely recorded, without accompanying hypotheses or speculations of any kind, as the plan of my projected work excludes, I may say, almost every thing but facts. The circumstances under which autumnal fever assumes a malignant type, its treatment, and the pathological anatomy of its victims, are of the deepest interest. It is almost discreditable to us as a profession that, this fever, the great endemic of the United States, should be so little known by its anatomical characters. Essentially rural in its prevalence, it is to the physicians who practise in the country, that we must look for this, and indeed all portions of its history. Of yellow fever, the same remark might be made; but it is chiefly in New Orleans and Mobile, that its treatment and the lesions of structure which it produces, can be studied with success. When, however, it appears in villages the mode of its origin may be investigated, and facts collected that cannot fail to shed light on its cause. It frequently happens, that people go into the country with the *semina* of the fever in their systems, and are taken down. The degree in which the disease spreads from them, if it ever does, deserves the deepest attention. Thus village and country practitioners, not less than those of cities, may contribute to the settlement of the question which has so long divided the profession and agitated the community.

In the South, I find that *trismus nascentium* and *tetanus* both traumatic and idiopathic, are much more frequent than in the higher latitudes, and therefore deserve special attention.

There is reason to think, moreover, that uterine affections, both organic and functional, prevail more below, than above the latitude of 33°, and the study of them is of course a special duty of the physicians of the former.

On the other hand, the winter endemics, especially the phlegmasiæ of the lungs, with tubercular phthisis and scrofula, the natural group of spring and summer diseases, cholera morbus, cholera infantum, diarrhœa and dysentery; and the eruptive fevers, appear to be milder in these latitudes, than on the banks of the Ohio and the shores of the northern lakes.

concerning the whole of which I am anxious to receive authentic information.

I have not, however, made these specifications with the design of limiting those who may feel inclined to afford assistance; for every new fact relative to the causes, symptoms, and treatment of all orders of the maladies of this region, will be gratefully received.

It is my intention to present, in separate chapters, an account of the physiology and diseases of the Negro and the Indian, compared with each other, and with the white man. For this purpose I have collected a considerable number of interesting observations, but wish for many more; and will be thankful to those who may have mingled much with the Indians, and those who practise on the cotton and sugar plantations, for all the facts they can supply, not only in relation to those races, but the families of mixed-blood Mulattoes, Quadroons, and Mestizoes. I am particularly anxious to acquire precise information concerning the results of the intermarriages of these races for several generations, as it has been lately affirmed, that after three or four generations they prove unprolific, and the races expire.

On my return to Louisville, at the opening of the next session of its Medical Institute, I hope to begin the arrangement of the facts I have collected, and will be pleased to receive contributions throughout the winter, and, indeed, to the end of the following summer. If gentlemen should at any time prefer to publish their observations, and for that purpose should send them to you, or to the editors of the Western Journal of Medicine and Surgery, in Louisville, they will be as available to my object as if sent to me in manuscript.

In conclusion, gentlemen, suffer me to express the hope that your laudable enterprize may be extensively patronized. Notwithstanding so many Journals are published in the United States, I have had opportunities of knowing that there are physicians in every part of the West and South, who do not receive one, although all who practise medicine should take at least two, if they would keep up with the improvements in the profession.

With respect,

I am your very ob't serv't,

DANIEL DRAKE, M.D.

New Orleans, May 9th, 1844.

Quackery in England.—Quackery, like sin, is very ancient. It flourished in ancient Rome, as well as in modern Europe. Nor does it depend for its prosperity on the ignorance of the uneducated classes. The faith of that singular compound of folly and knavery, the world, is kept up by peers, judges, and bishops, by clowns, operatives, and old women, who furnish certificates to the value of nostrums, and testify in favor of impostures, delusion, and villiany. In this country the sale of quack medicines has kept pace with the 'march of intellect.' Forty years ago they yielded an anual revenue to the State of about £14,000. In 1841 the amount received was £50,000. For the last half century, English governments have looked upon this vile revenue as more valuable, in their judgment, than the health of the people, the prosperity of the regular profession, and the improvement of physic.—*London Lancet.*

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LOUISVILLE, AUGUST 1, 1844.

TRAVELING LETTERS FROM THE SENIOR EDITOR.

NO. II.

NEW ORLEANS, May, 1844.

To my Colleagues:

GETLEMEN:—After writing to you from Mobile I returned to New Orleans, where I have spent the last two or three weeks, each of which has presented me with *materiel* for a long and desultory epistle, but the sedative influences of the South will protect both you and our readers from more than one.

I need scarcely tell you, that this place presents a sort of geological and social similitude. The mass of muddy, moving, waters which once mingled with the sea at this spot, brought down and deposited here particles and fragments of all the rocks, and soils, and forests of the heart of our continent. The same waters now bring down upon their turbid bosom the people and productions of the same lands. Hence the strata are not more compounded than the

population which treads upon them. But here the analogy stops, for the strata are at rest, while the people are as agitated and restless as the atoms which float in the currents of the giant river. Such a spot presents much to interest and instruct the inquisitive physiologist and physician, and in commencing my letter, I scarcely know how to settle upon a particular topic. The hospitals of the city would seem, however, most appropriate for a medical traveler, and I shall therefore devote my letter to them, and the disease which supplies them with more patients than any other. Of these hospitals three are private and one public. Concerning the former, I shall say but little, as I wish to reserve ample space for the latter.

Luzenberg's Hospital.

This handsomely embellished and inviting establishment is situated hard by the Ponchartrain rail road, nearly two miles from the river, and consequently out of the city. The buildings are of wood, one and two stories high, and embosomed in trees and flowering shrubs, both native and exotic. By a contract with the general government, this is at present the hospital for sick seamen; it assumes, therefore, somewhat the character, as well as the appearance of a public institution.

Maison de Sante.

The owners, who are the physicians and surgeons of this hospital, are Drs. Stone, Kennedy and Carpenter. It stands in the edge of the city, on the corner of Canal and Claiborne streets, about three quarters of a mile from the river; is built of brick, plastered and penciled so as to resemble stone; has a verandah two stories high in the rear, and a lofty Doric portico in front. On one side of it there is a pleasant shrubbery, embracing many flowering exotics; and behind it, on Claiborne street, a supplemental house for colored patients.

Circus Street Infirmary.

This establishment, the property, and under the care of Drs. Campbell and Mackie, is situated in Circus street, near Poydras, and is nearer the steamboat landing than any other, and consequently more convenient to those who arrive from the upper country, ill with acute diseases. The buildings are of wood, well screened from

the sun by verandahs, but destitute of surrounding trees and gardens.

These three private hospitals are at once creditable to their proprietors, and eminently useful to strangers, who cannot fail to be better nursed and looked after in either of them than in the hotels of the city. The physicians and surgeons, moreover, by whom they have been erected and are attended, are among the most scientific and experienced of the city; finally, the expense of a fit of sickness in one of them, will, in general, be less than in one of the hotels. I would, therefore, strongly recommend to our up-country friends, when taken ill in this 'city of strangers,' to make an early choice of one of these asylums. I say *early* for they need some prompting on this point. The diseases, especially the fevers of this place, are more rapid, and on the whole, perhaps, less painful than those of the interior, and are, therefore, very often allowed to advance to an incurable stage before they receive attention. To be successfully treated, they must be yielded to, and met with medicine in their first or forming stages, when, in general, they are quite as curable as those on the banks of the Ohio or Missouri.

Before proceeding to the great public infirmary of the city, I must speak a word or two concerning the unfinished

Commercial Hospital.

It was begun by the general government in or about the year 1836, and is roofed in. It is situated on the opposite side of the river, adjoining the open village of McDonoughville, and the site is well chosen, as it is more convenient to the ships and boats of the harbor, than it could have been placed on the city side. In company with Drs. Fearn, Carpenter, and Fenner, the last of whom is one of the editors of a forth-coming medical journal in this city, I made a visit to it a couple of days since. As a skeleton we were pleased with its appearance, and when its flesh and organs and skin shall be added, its appearance, as a public edifice, will not be unworthy of the nation, nor uninviting to the annual hundreds of salt and fresh water men who are sick at this vast commercial emporium. Why that which was begun eight years ago, and ought to have been erected eight years before, has been suffered to stop and retrograde in its development, is best known to those who are in the secrets of a government, which a political metempsychosis seems to animate

with a new spirit every four years. The great river, on whose banks we stood while surveying this monument of culpable caprice, washes away the land in one place, and deposits land in another, to be in turn swept away; and thus it is with our much vaunted republican government; projects are begun and suffered to perish, *in embryo*, while some new scheme fixes the attention of one set of rulers, to be abandoned to premature decay by another. We would have ascended to the floorless portico of the edifice, but when half way up the unfinished stair case of Quincey granite, the tall weeds from beneath would but treacherously have supported our feet. In the rear, from under a projected verandah, we drove out the cattle which were browsing on the weeds and grass, and on looking into one of the future kitchens, we saw a dead cow lying on the ground in its centre. In the long cycle of changes in our administration, the Commercial Hospital of New Orleans, in which the whole Union is interested, may again take its turn.

The Charity Hospital.

I come now to that public charity which is at once an honor to the city and State to which it belongs, and a blessing to thousands of the people of the United States and of Europe.

From Martin's History of Louisiana it appears, that a hospital was founded by Jesuits and Ursuline nuns, in the year 1727. It was under the care of the latter, and especially designed for the military. It was placed near the nunnery, at the corner of Chartres and Bienville streets. Subsequently, according to the *Historical Epitome of the State of Louisiana*, p. 323, there was a wooden hospital building for indigent persons, on Rampart street, between Toulouse and St. Peter streets, which was blown down in 1779.

An account of what followed for the next 30 years is condensed into a note to *Bullard and Curry's Digest of the Laws of Louisiana*, and is as follows:

"The Charity Hospital was founded by private donations until 1786, when a new building was erected by Dr. Roxas, and completed in 1786, at a cost of 114,000 dollars, and was called the 'New Charity Hospital of St. Charles.' The munificent founder furthermore endowed it with an annual revenue of 1,500 dollars, from the rents of stores, at the corner of St. Peter and Levee streets. It continued under the patronage and direction of the family of its founder and beneficent donor, until the 20th of February, 1811,

when by an act of the Legislature of the Territory, it was made the duty of the Corporation of New Orleans to compromise with the patron of the Hospital of Charity, and establish it on a plan more perfect."

In 1814 an act was passed creating a Council of Administration, of which the Governor of the State is *ex-officio* the president, to manage all its affairs; since which a Vice President has been created. Two of the administrators visit the institution at least twice a week. By this act, every public ball and concert was to pay 10 dollars into the treasury of the hospital; and every theatre to give it four benefits a year. By the same act, the Governor was instructed to write to the Governors of the several States bordering on the Mississippi and Ohio rivers, soliciting subscriptions for the enlargement of the building. To this call the State of Pennsylvania nobly responded in 1817, by appropriating 10,000 dollars, but the other States remained silent. In 1818, the Legislature directed the sale of the edifice on Canal street, the purchase of a new site, and the erection of a more extensive and commodious building; which was accordingly done, at a cost of about 150,000 dollars; and the patients were transferred to it in the winter of 1833–'4. In 1837, the Legislature ordered, that the net proceeds, received into the State treasury, from all forfeited bonds and recognisances, and all fines in criminal cases, and for contempt of court, should go to the hospital; provided, that more than 40,000 dollars should not be paid in one year. Notwithstanding this, it became necessary, in the very next year, to authorize the issue of State bonds to the amount of 100,000 dollars for the relief of the institution. By the same law, the four benefits a year from each theatre was commuted for 500 dollars per annum; each circus was taxed 100 dollars, and each show 50 dollars. In 1840, 40,000 dollars were appropriated out of the State treasury, of which 15,000 were to be applied to general objects, and 25,000 dollars to the erection of a lunatic asylum, for the State, on the same square with the hospital. Subsequently, another law, levying a tax on all passengers arriving in the city promised to render the revenues of the establishment sufficiently ample; but after a year its constitutionality was contested, and it is at present unexecuted. Such is a historical outline of the efforts of the State, for establishing and adequately endowing this noble public charity, as I have collected them from the Digest of

Laws quoted above, and from the printed reports of the administrators.

For a notice of the edifice itself I will depend on the 'Historical Epitome,' the general correctness of which I can avouch.

After mentioning that it stands on the square, bounded by Gironde, Gravier, St. Mary, and Common streets, this work says: "The New Charity Hospital, so called, is a building of great size, being about 290 feet in its total length, and three stories high. It is composed of a *corps de loges* in the centre, 116 feet front by 76 in depth, connected by the main building to the two wings, all three projecting in front and rear from the main edifice. The principal entrance, from Common street, is under a Doric portico, which covers the lower story of the *corps de loges*, into a spacious hall, intersected at right angles by another, running lengthwise the building on which the wards open. From this hall, access is had by broad stairs to the upper stories, which are similarly divided, and thus to the cupola, from which there is a magnificent view of the city and its environs." Within the building there are accommodations for the house physician and six students of medicine who wait upon the sick; an apothecary and his shop; and 18 or twenty sisters of charity. There are also two chapels, one for protestant, and one for Roman catholic worship. The edifice is designed to accommodate 540 patients, but during epidemics, a much larger number have been admitted.

I must now come to the inmates of this capacious establishment, the average annual number of which, for the last 14 years, has been 4,576, or 64,034 in all, as is shown by the tables published by the Administrators.

Of the great aggregate, but 625 were natives of Louisiana; many more were citizens of New Orleans by naturalization. Formerly the registers of the hospital did not distinguish between recent and old emigrants, but lately that has been done, and the two last annual publications of the Board of Administration, distinguish those patients who have been in New Orleans less than three years, from those who had been longer there. Nevertheless, this is not very exact, as the distinction relates to natives of Louisiana, as well as other States and foreign countries; but the number of persons born in that State who migrate to the city is not great. In 1842 and 1843, the number of patients admitted into the hospital was 9,421,

of which 7,348 had been in the city less than three years. If we apply this ratio of about 78 per cent., to the number for 14 years—64,034—we have 49,944 persons resident less than three years in New Orleans, relieved at the hospital within that time. Of the foreigners, 50 per cent. have been Irish, nearly 14 per cent. German, 10 per cent. English, and something less than 8 per cent. French. The remaining 18 per cent., from various countries. New Orleans is at once the paradise and the grave of the half civilized Irish. Warm-hearted, gregarious, social, sensual, and reckless—fond of his shovel and his bottle, and cast upon a spot where the former is in demand and the latter within his reach, the generous-spirited Hibernian, on the mud-banks of the Mississippi, soon forgets the green hills of his native Shannon, and revelling for a brief space of time amid luxuries more abundant than he had ever dreamed of, is sent to the Charity hospital, whence he is transferred to fertilize the soil which but a few days before he might have been gaily up-heaving. But I must return from this rather inappropriate flight of fancy to our statistical tables.

Of the natives of the United States admitted, during 14 years, the following were from States lying in whole or in part within the Valley of the Mississippi:

Pennsylvania	3,281.	Tennessee	614
Virginia	1,541.	Indiana	284
Kentucky	943.	Missouri	185
Ohio	910.	Illinois	126
Louisiana	625.	Mississippi	118
		Arkansas	17——8,644.

Of this number, less than twelve and a half per cent. are natives of Louisiana. Now, I will ask, is it either just or generous, that the support of a hospital, so extensively occupied by the citizens of other States, should devolve entirely on Louisiana, especially when but few of her citizens are found in the infirmaries of the States which crowd the wards of her own? It may be replied, that her commercial emporium is built up by the voyages which are made to it from those States; but to this it may be answered, that it is those voyages which advance the prosperity of the people who make them, and that the commerce which they sustain is reciprocally beneficial. To my own mind, it is a manifest duty of the States interested in

the trade to New Orleans, to make occasional or annual appropriations to the support of the Charity hospital, according to the average number of their citizens, respectively, admitted into it.

I have another fact which goes to show how small a proportion of the patients of the Charity are residents of the city. It is the great number of men compared with women. In 16 months, being the whole of 1841 and part of 1844, 4,743 patients were admitted, of which 4,050 were males, and only 693 females. This disparity could not happen in an indigenous population, and shows that New Orleans is sought out by a vast number of the men of the States which dip into the great valley.

On the average number of patients in the hospital I have not much to say. At the end of February, 1844, there were 348, of March 395, of April 326, of May 316, averaging 346, in the healthiest portion of the year. Of course the number is much greater in autumn.

I have not time to analyse the registers of the hospital so far as to give you a view of the diseases of its inmates, but will select Autumnal and Yellow Fevers, as of deepest interest.

Autumnal Fever.—In 17 years, from 1825 to 1843 inclusive, there were admitted with various kinds of autumnal fever, 13,300 patients, or 782 annually. Of these 654 died, making about the ratio of 491 in 10,000. In four years, ending with 1833, 2,724 were admitted, of whom 174 died, or 639 in 10,000. In the four years ending with 1844, 4,478 were admitted, of which 121 died, or only 270 in 10,000; a difference in the ratio of mortality between the two periods, of 368 in 10,000;—an improvement which beautifully corresponds with the change of treatment from drastic purging and profuse salivation, to mild aperients, cupping, and the sulphate of quinine.

Yellow Fever.—Of all the hospitals in the United States, the Charity presents the most ample opportunities for studying this much dreaded and peculiar malady. I say peculiar, because my inquiries have nearly convinced me, that it should not be confounded with autumnal fever. It conforms, however, to several of the laws of that disease, as will be seen by the following tabular view, compiled with considerable labor, from *all* the records of the hospital. It exhibits the rise, number of patients, and deaths, from 1818 to 1843 inclusive.

STATISTICAL TABLE OF YELLOW FEVER FOR 26 YEARS.

Years.	Time of the first 12 cases.	No. of Admittances.	No. of Deaths.
A. D. 1818	From August 30 to Sept. 8	48	30
1819	July 12 to 28*	141	unknown.
1820	July 21 to Aug. 9	122	unknown.
1821	None.	None.	unknown.
1822	Sept. 1 to 7	349	unknown.
1823	Aug. 23 to Sept. 11	2	unknown.
1824	Aug. 4 to 26	176	unknown.
1825	June 23 to July 12	92	59
1826	May 18 to July 11	23	5
1827	July 19 to July 30†	388	265
1828	June 18 to July 25	305	unknown.
1829	May 23 to June 18	452	unknown.
1830	July 15 to July 29	416	158
1831	June 9 to Sept. 13	3	00
1832	Aug. 15—unknown	36	22
1833	July 12 to Aug. 7	887	449
1834	Aug. 28 to Sept. 30	150‡	unknown.
1835	Aug. 23 to Sept. 1	505	284
1836	Aug. 24 to Oct. 4	7	5
1837	July 24 to Aug. 6	1,194	613
1838	Aug. 25 to Oct. 2	24	unknown.
1839	July 23 to Aug. —	1,086	452
1840	July 25 to Aug. 5	2	1
1841	July 27 to Aug. 12	1,113	591
1842	July 30 to Aug. 23	410	214
1843	July 5 to July 29	1,053	487

From this table we find, that the time of the appearance of yellow fever ranges from the 18th of May to the 1st of September—a period of 15 weeks, and that the frequency of its beginning in the different months is as follows:—July, August, June, May, and September—oftener in either of the two former, than all the three latter taken together.

The following table, comprehending only three years, shows the relative prevalence of the disease in the different months:

* One case reported May 7.
† Imperfect, 12 days omitted.
‡ Imperfect.

TABLE.

Years.	July.	August.	Sept.	October.	Nov.	Dec.
1841	0	177	642	252	37	8
1842	1	46	247	93	23	0
1843	23	188	365	351	111	15
Average	8	137	418	232	57	7⅓

Thus the order of predominance in these three years, is September, October, August, November, July, and December, the two latter, however, being nearly equal.

I must now give you some of the statistics of death. In 10 years lying between 1825 and 1843, 5,973 patients with yellow fever, were admitted, of which 2,967 died, or within a fraction of 50 per cent. We may place it at that. If we add to the number admitted in those years, the numbers for the years the mortality of which was not recorded, we have an aggregate of 8,758—one-half of whom we may assume died, giving an annual average mortality, for 26 years, a fraction more than 172.

The mortality of 50 per cent. may seem large, and is indeed large, compared with that in the private practice of our brethren in New Orleans. But it should be stated, that a great number of the patients are admitted in a moribund condition—are sent to the hospital to die, that they may be buried at the public expense. In fact, from the roaming and reckless character of those who depend on the hospital in sickness, we may presume that but few of them find their way to it in the early stage of the disease.

I have sought to ascertain whether the treatment of the malady is undergoing any amelioration; and will give you the comparison of two periods, each of four years. In 1825, '27, '30, and '33, 1,783 were admitted, of whom 931 died, giving a mortality of 52.21 per cent., or 5,221 in 10,000. In the years 1839, '41, '42 and '43, 3,662 were admitted, and the deaths were 1,747, equal to 47.70 per cent., or 4,770 in 10,000. The difference of 4.21 per cent., or 421 in 10,000 in favor of the last period, during which a milder treatment has been pursued, clearly indicates, either a less malignant disease, or a more appropriate method of cure—I shall assume the latter.

The question is often asked, does yellow fever occur in New Orleans every year? By reference to the statistical table before me, I find that of 26 years, 5 produced either none or less than 10; five produced more than 10 but less than 100; the other 16 more than 100. The second group, and the last year of the first, rather arbitrarily separated from it, deserve especial notice, as presenting the disease in a sporadic form, and, therefore, bearing on the question of local origin, or importation. It may be said, that the disease has been epidemic about two thirds, and sporadic about one-fifth of the years, for the last 26, and, consequently, that it prevails almost as certainly in New Orleans, as does autumnal fever in any of our country towns, and far more frequently than measles or scarlatina invades either.

It has been said, that the disease is epidemic every other year, but the table to which I have referred shows this to be a fallacy; not that such has not been the case, but that it was decidedly prevalent from 1827 to 1830 inclusive; from 1833 to 1835; and from 1841 to 1843. On the other hand, no period of three years, and but one of two, has elapsed since 1818, in which it was only sporadic.

A few additional observations will bring this tedious epistle to a close.

Private patients are accommodated in the Charity. Poor people of the city sometimes resort to it in sickness, and strangers may be made very comfortable in it.

A part of its revenues, amounting to something like $1,500 a year, is derived from a charge of 25 cents at the gate to those who visit the institution. This is not exacted from the near relatives of the sick.

I am sorry to feel it my duty to reiterate, that the registers of the hospital have been very imperfectly kept. 1st. The names of the diseases, epidemic cholera excepted, for the first four months of 1834 are wanting. 2d. The record is lost from 18th of September to 13th of October, 1832. 3d. There is no uniformity in the names given to the same disease. 4th. The clerk at the gate, who admits the patient, is absurdly ordered to name his disease, a task impracticable, under the circumstances even for a physician, producing a record of no value, and at the same time calculated to mislead; for the attending physician not unfrequently neglects to make to the

clerk any return of the malady, and at the end of the month when a report is made to the Administrators, the names given by the clerk, become permanent.

Without multiplying these specifications, I will observe that at the present time the medical gentlemen in attendance, appear wide awake to these and some other defects, and will no doubt do all that can be done to remedy them. There are, however, two difficulties in the way; first, the perpetual succession of new medical and surgical attendants; second, the want of meetings of consultation and co-operation.

The wards of the hospital are admirably ventilated and kept remarkably clean; indeed, the whole interior exhibits evidence of the superintending hand of woman. I was introduced to the Sister superior, appropriately called *Regina*, and found her dignified, intelligent, and well-informed on the affairs of the establishment. She and the sisterhood over which she presides, in connexion with the amiable and well-informed house physician, Dr. Waverstrandt, direct and see executed the entire internal economy of the establishment —the former receiving little other compensation than their support in the institution. Thus they are truly *Sisters of Charity*, and the sick stranger may receive his bitter dose from one of them as from the hand of the sister whom he has left behind him.

But I must close this communication to resume the inquiries which demand all my time, and which so press upon me, that I fear there are many inaccuracies in what I have so hastily sketched off.

Your very obedient servant,
DANIEL DRAKE.

NO. III.

NEW ORLEANS, May, 1844.

To my Colleagues:

GENTLEMEN—In my last, a few days since, you had, I fear, rather a tedious account of some things connected with the Charity Hospital. My present will not oppress you with statistics nor perplex you with problems, two most desirable exemptions, when the mer-

cury is aspiring to 90°. I propose in the first place to say a few words on the

Medical College of Louisiana.

This institution, as we say in Kentucky, is 'picking up.' Since my visit last spring, its professors have built a new house—an edifice which will be found large enough for 150 students or more, and is planned with considerable skill. There are in it two lecture rooms, a dissecting room, a cabinet room, &c., and its exterior appearance is respectable, if not magnificent. As yet the collections of *materiel* are not as extensive as I should have expected, but the faculty are making efforts to increase them, and to engraft upon the institution a medical and philosophical reading-room. The number of pupils last year was about 80, which is an encouraging increase on all past sessions. The professors of this college seem to be left to the prosecution of their enterprize with less of public co-operation and professional sympathy, than is common in such cases. All which the State of Louisiana has done, I believe, is to allow the edifice to be built on an *acute* angle of the public rhomboid (I cannot call it a square) which could not be used for any thing else; and the city has done still less—that is to say, as far as I can hear, it has done nothing. Familiar as you are with the thought of what the city of Louisville has done for her cherished institution, you will scarcely comprehend the neglect of New Orleans; but still the difference may be accounted for. The native population of Louisville and the immigrant, are of the same kind; and, therefore, readily unite in objects designed to advance the interests and raise the character of the city. But the natives of New Orleans and the immigrants are immiscible, and, like uncombinable atoms, float among each other without coalescing. The true natives are the creoles, who take not the least interest in the school, but send their medical students to Paris, quite as much as before the transfer of Louisiana to the United States; and, as to the Anglo-American emigrants, with a small number of exceptions, they feel no interest in any thing, but the commerce which attracted them hither, to retain them till they make a fortune, and no longer. But, I have said, the school does not enjoy the sympathy, and I may add, the good will, of the profession in the city. The French physicians are not represented in it, as I think they should be, and contribute

nothing to its support; and as to the American, most of them consider themselves quite as well qualified to teach as their brethren who have been chosen. Thus it is, that the professors are left to take care of themselves. Under these sinister circumstances, it is not marvellous that the school has not had a vigorous growth. But there are other causes of retardation, more permanent if not more efficient. Students of medicine are either poor or in 'moderate circumstances,' and New Orleans is an expensive place of residence; there are moreover, many alluring temptations to pleasure and dissipation; finally, it is almost destitute of literary and scientific associations, and consequently its social atmosphere is unfavorable to the healthful progress of the student. On the other hand, the opportunities for the study of anatomy, both healthy and morbid, are, or rather might be made, superior to those of any other city in the Union, and the wards of the Charity Hospital afford opportunities for clinical observation, on many, if not all forms of disease, as ample as could be desired. These elements of medical instruction will no doubt at last prevail, and build up a great school in the metropolis of the South-west.

Of the existing Faculty I cannot speak if I would, for I am not acquainted with the whole, have had opportunities of professional intercourse with but two or three, and have heard but one of them lecture.

The professor of chemistry, well known in the West by his writings on Botany and Geology, is now engaged on a very different matter. Being refiner of the mint, he has acquired possession of a vast number of counterfeit coins, and is about to publish a book of *fac similies*, by which they can be known.

The professor of the Institutes has lately published a small volume on the nervous system, which is said to evince very considerable research and acute thinking. I have not yet had time to examine it, but hope one of you will present whatever it contains of original matter to our readers. Another, the professor of materia medica, has more lately still published a large pamphlet on the transmission of yellow fever, in which he presents an array of *ex parte* facts, so imposing as to have carried conviction to the minds of some professional and many non-professional persons,

who, in conformity with his recommendations, are becoming the advocates of a

Quarantine.

In this recommendation we find physicians who think and feel alike, on few other topics, heartily concurring. The quarantine party has three head men. Professor Carpenter, of whom I have just spoken, Dr. Luzenberg, who represents the party opposed to the college, and Dr. Beugnot, who stands at the head of the French profession. The two latter made a report to the Legislature at their last session, in favor of a quarantine, and Professor Carpenter's book was designed to act in the same quarter. Notwithstanding the facts and arguments presented by these distinguished advocates of importation, two of whom at least were educated in the theory of local origin, the Legislature refused to grant a quarantine. Whether this was right or wrong, I am not prepared to say, but I fear, that should it be attempted, such a quarantine as would be necessary to a satisfactory experiment, will not be maintained; and, certainly, no other is desirable to either party. The State of Louisiana should feel and manifest an interest in *this* quarantine. If the disease is really imported into New Orleans, it is of course propagated by commercial operations to the towns of the interior. For them to establish a quarantine against New Orleans, would greatly embarrass the business and intercourse of the people on the Lower Mississippi, and, at last, village quarantines will be found as inefficient as they will prove annoying. Nothing but a city quarantine should, therefore, be attempted. This would shackle one branch of foreign trade, but leave all the rest, and that of the interior, unobstructed. An effective quarantine below New Orleans would render any above it unnecessary; for if the disease should still appear in that city, it would prove one of two things—that the disease is of local origin, or cannot be excluded by restrictions on commerce, and, in either case, quarantines above the city would be absurd. I cannot perceive that a quarantine of the city would essentially affect its exterior commerce, which consists more in the exportation of cotton than importations from all quarters of the world taken together. If vessels from the ports whence the yellow fever is *supposed* to be introduced, were, for half the year, subjected to quarantine, the inconvenience could not be serious; as a standing regulation of that kind, would cause the chief importations to be made in the

other half. Unsatisfied with every theory of the origin of yellow fever, I should be glad to see a decisive experiment on any one of them. In connexion with this subject, I may speak of the

Medico-Chirurgical Society,

of which Dr. Luzenberg is president. It embraces about 30 members, of whom not more than half were present on the evening of my attendance. It is regarded as a party society, and under that feeling some physicians have not been offered membership and others have declined it. The society is incorporated, and meets once a month, when papers are read, and the business common to such associations transacted. The report in favor of the *importability* of yellow fever, of which I have spoken, was made to this society, by Drs. Luzenberg and Beugnot, Dr. Mercier, a promising young Creole surgeon, dissenting. An attempt to get a vote of the society in its favor was unsuccessful; but yet they sent it to the Legislature, where, as I have stated, it failed to convince the majority that a qarantine ought to be authorised. Had it gone less ambitiously into the consideration of other diseases, and more into the proofs that *yellow fever* is imported, its effect on the minds of the honorable body, to whom it was addressed, might have been different. The society proposes, among other laudable objects, to investigate this subject by original observations, but unless its members and committees proceed in their labor, as though they had not already 'made up their minds,' I fear they will not very soon settle the question.

Professional Brotherhood.

Another object intended to be accomplished by this society is to unitize and harmonize the profession in New Orleans, but it is easy to perceive, that instead of working out that desirable end it is already producing the opposite. Indeed, my impression is, that from the 'nature of things' in this great city, such harmony will not show itself much before the time when the suspended materials of the Mississippi will crystalize into soluble salts, and its waters become transparent.

New Orleans is, and must continue to be, famous for individuality of character. Among its people, the divellent forces rather exceed the attractive, and are likely to remain in the ascendant. It is the res-

idence of the many, the home of a few; and the majority of the former are little inclined to allow themselves to be drawn into any social alliances. They come hither, as I have intimated, to make or remake their fortunes, and think lightly of any thing else. Our brethren participate in the general character of the place, and many are quite unacquainted with each other. But few of them have been long in the city, and still fewer, I judge, are inclined to identify themselves with its various social and scientific interests. One of the oldest, in point of residence, is a graduate of Transylvania University of 1825 or '26; and a very large proportion are much younger in their professional age. Thus they are coming and going—some to the grave, some to other places, and some into other business. All this, as I philosophically remarked, a few sentences back, arises from the 'nature of the case,' and will continue till the city shall rear up her physicians from among her native sons; till when, no remarkable concord and co-operation are to be expected.

I have seen many things here, which would interest you and our readers, as new, but must confine myself to professional matters, of which I have not time at present to say anything more.

Your obedient servant,

D. D.

IPECACUAN-ASTHMA.

For a report of the following interesting case we are indebted to a student of medicine in the Medical Institute of Louisville, Mr. S. T. Payne, of Tennessee. The particulars of it will recall to the memory of the reader a similar case reported by Dr. Felix Robertson, of Nashville, in the 8th volume of this Journal. The multiplication of such cases will put practitioners and apothecaries on their guard against unnecessarily exposing their lungs to the noxious influence of ipecacuanha. Mr. Payne says:

"In filling a jar with ipecac., one day last spring, I incautiously inhaled a portion of it with the air while holding my head over the dust that rose. Very soon I was affected with a peculiar uneasiness in the chest which caused me to withdraw. This becoming

somewhat less, I returned to the operation, but before I had emptied all the article out of the paper the sensation in the lungs grew so distressing that I became alarmed. The symptoms of my case at this moment were similar to those described by practical authors as characteristic of asthma. I had great difficulty of breathing, with a sense of suffocation, a dry, hacking cough, effusion of tears, quick pulse, violent headache, &c. The first thing I did was to take an emetic of ipecac., but I derived no benefit from it. Various minor remedies were tried, but I got no relief till I had blood drawn from my arm, which was done on the third day, when all the symptoms indicated the access of inflammation. I found it necessary to resort three times to venesection, and it was only after the third bleeding that the dyspnœa and other distressing symptoms gave way. Subsequently, by the advice of a physician who was called in, and who pronounced my case a dangerous one, I used with advantage various anti-spasmodics, lobelia, and the warm bath, and finally recovered in three weeks. Soon after getting about, I had occasion to administer an emetic of ipecac. to a patient, and although I handled the medicine cautiously, to my astonishment and great alarm, I was attacked with the symptoms from which I had just been suffering so severely. They were much milder, however, and continued for a shorter time. I find it now impracticable to handle ipecac. at all without experiencing unpleasant sensations in my chest. At the time that I was attacked I had not read the report of Dr. Robertson's case, and had no suspicion, for some time, that my illness was brought on by inhaling the ipecac."

Watson, in his Lectures, (p. 643) alludes to cases of this description, and proposes for the affection the name which we have adopted. It appears to be precisely analogous to hay-asthma, of which English physicians have written under the name of 'summer cold,' or 'catarrhus æstivus,' as quoted by Bostock in the Medico-Chirurgical Transactions. Of this affection Elliotson in his Practice (p. 772, et seq.) relates a number of striking and interesting cases. The same writer mentions instances in which a similar train of symptoms was excited by ipecacuan. He says "I heard a physician say that there was a case related on which he could depend—though I would not myself vouch for its accuracy,—of a person who had such a susceptibility of ipecacuanha, that on entering a room and being seized with asthma, he declared that there was ipe-

cacuanha about. It was at first denied; but at last some one recollected that there was a box of ipecacuanha-lozenges in a table drawer. That," he adds, "was going very far; but it is a fact that some persons are seized with asthma, if ipecacuanha be near them."

In Dr. Robertson's case it was once brought on, we believe, by the application of the tip of his tongue to a vial-cork moistened with wine of ipecac. We know a highly respectable and intelligent lady in this neighborhood, who has had repeated attacks of an affection resembling asthma from slight exposure to the dust of ipecacuan. She is seized with these symptoms, we have been assured, if a dose of the medicine be dissolved in the room where she is.

The kindred affection—hay-asthma—is supposed to be occasioned by the pollen of flowers. Persons troubled with it derive relief by going to the sea-shore, beyond the reach of flowering plants. They are most painfully affected by walking over meadows when the grass is in bloom. It is known that many persons are attacked by distressing symptoms while sleeping in apartments where there are flowers. We knew a lady who suffered exceedingly with dyspnœa during all the season while flowers were blooming around her house. Is it not probable that in these cases too it is the pollen which gives rise to the bronchial irritation?

The affection, whether excited by ipecacuan or flowering plants, does not seem to be asthma merely, but a combination of catarrh and asthma. It consists in excessive irritation of the mucous membrane of the eyes, nose, and the whole of the air passages. Elliotson, in view of the fact that the irritating substances are compound, proposes chlorine as a remedy for the complaint; and in several cases where it was tried, he states that the result was satisfactory. The patients inhaled the fumes from saucers filled with a solution of the chloride of lime or of soda. Y.

PROFESSOR DRAKE ON THE DISEASES OF THE SOUTH.

We beg leave to invite the attention of our readers to the letter of Professor Drake, published in another part of the Journal, asking communications from the practitioners of the South concerning the diseases of their region of country. In a letter to us a few days since, written on his way to St. Louis, Professor D. says: "I am

now leaving the South, having in two visits devoted myself with some diligence, for six months, to the study of its diseases; and I feel that I can hereafter speak of them, in my lectures, with a degree of confidence which I could not do before. Y.

DR. BELL'S SELECT MEDICAL LIBRARY.

We derive greater pleasure from none of our exchanges than from Dr. Bell's Bulletin and Select Medical Library. The Bulletin for July came accompanied by a volume of upwards of 500 pages, comprising the whole of Dr. Robert Lee's Lectures on the Theory and Practice of midwifery, delivered in St. George's Hospital, London. These lectures, which were first printed in the London Medical Gazette, have been revised by the author, and from his edition the work before us has been strictly copied without note or comment. We have not had time to read it carefully, but a cursory examination has satisfied us that it is the production of a highly cultivated and practical mind, and has been elaborated with a degree of judgment and care which must render the lectures a valuable record of professional learning and experience. The profession has a guaranty, in the excellent taste, and discriminating judgment of the editor of the Select Medical Library, that nothing will come forth under his auspices of a trashy, superficial, or spurious character. Y.

A LIFE OF ACCIDENTS.

A correspondent, in a recent letter to us, speaking of an accident that had befallen a common friend, gives the following little bit of history:

"He has now had a white-swelling, has had his leg broken, his thigh broken, his right arm broken, his left shoulder dislocated, his right eye put out, and one-third of the retina of the left paralyzed, and has been *snake-bitten*."

Our correspondent asks, very gravely, "what do you think of that?" We repeat the question to the reader, only adding that the gentleman to whom it refers is an extensive merchant, is the father of a large family, is a most estimable and useful man, and bids fair to live yet many years, C.

MEDICAL EXAMINER AND WESTERN MEDICAL SCHOOLS.

We must say that we consider the allusion to *Western Medical Schools* by the editor of the Medical Examiner, in the number of that paper for June 29th, an unfortunate one. We hope without intending it, he has made a charge againsthis brethren in this region which must give general and deep offence. A distinguished writer and teacher on this side of the mountains has felt himself called upon to enter his protest against the charge of the Medical Examiner, and to defend western schools of medicine against the imputation of having deteriorated the profession in the Valley of the Mississippi. In the performance of this task he has indulged in a severity of remark which we should avoid; but it will not be denied by any one who has read his defence, that it is one of singular ability. We make room for a few extracts from it. Speaking of Western Medical Schools, the writer says:

"Nor do we hesitate to assert, that, in them the teaching is as well planned and extensive, and as thoroughly and efficiently executed, as any other schools in the United States. In proof of all this, the pupils of Western schools, when under examination, acquit themselves as creditably as do those of Eastern schools, in every branch of medicine, and, on the treatment of western fevers, much more so.

"The gentleman, as we have already seen, utters, midway between sighs and tears, a piteous jeremiad, because, in his own words, 'since the establishment of medical schools in the Valley of the Mississippi, comparatively few young men from that quarter seek instruction *elsewhere*,' For 'elsewhere,' read *in* the JEFFRSON MEDICAL COLLEGE, and the meaning of the clause will be correctly told. For the only source of his lamentation is, not that medicine is less efficiently taught than formerly; but that the pupils of the West and South have, in a great measure, ceased to seek their education in the medical schools of the East. Why? Because they receive in the institutions of their own region, on easier terms, an education in *all respects* as good, and in some much better than they can possibly receive in the Atlantic schools.

"It is true, that a certain 'teacher in the south-west,' whom the Philadelphia Professor might as well have named, has long and earnestly inculcated the doctrine, that difference in climate, locality, soil, pursuit, habit, and diet, is productive of a corresponding difference in the diseases of man, as well as in those of the inferior animals, which imperatively demand a different mode of treatment; and that that mode can be learnt only by *observation* and *experience*. But it is equally true, that the doctrine did not originate with that teacher. Far otherwise.

"To allege that, previously to any experience in it, a physician can treat successfully a bold and malignant form of fever, bespeaks a degree of *ignorance* or *weakness*, or of an amalgamation of the two of which none but a medical ignoramus or intentional deceiver, can be suspected. As well may it be contended, that a young graduate in medicine, who has obtained his degree, by reading and attending lectures alone, without having ever visited a sick-room, or the ward of a hospital, is fully ripe for clinical practice. Yet is it a familiar fact that such a youth is more incompetent to the treatment of a severe and dangerous case of fever, than a moderately well-trained nurse. Even Sydenham has recorded the fact, that, on the explosion of a new and severe epidemic, in London, of whose diseases he had the knowledge of a life-time, he was too often unsuccessful in his treatment of the *first few cases* of it. Of that great luminary in medicine, therefore, *observation* and *experience* were *necessary instructors*. And, in relation to himself, Dr. Rush did not hesitate to make a like acknowledgment. When yellow fever moreover made its appearance in Philadelphia, in 1793, every honest and respectable practitioner in the place, was fully prepared to make the same avowal." Y.

LOUISVILLE SUMMER SCHOOL OF MEDICINE.

The lectures in the Louisville Summer School of Medicine will be resumed on the first Monday of September, and be continued until the last of October. Connected with this course, which will consist of three lectures a day, clinical instruction will be delivered at the Marine Hospital. The dissecting rooms will be open the first of October.

MEDICAL INSTITUTE OF LOUISVILLE.

We are requested to call the attention of students of medicine to the fact, that but *one introductory* lecture is now delivered annually in the Medical Institute of Louisville, and that the regular didactic lectures are begun the following day. By this innovation nearly an entire week is gained. It is the determination of the Faculty to adhere to this arrangement, which was first introduced last season.

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